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A color photograph of a woman cross-country skiing in a snowy, wooded landscape. She is wearing a light-colored jacket, dark pants, and sunglasses, and is holding ski poles. The background shows snow-covered trees and a bright, overexposed sky.

# North Carolina DENTAL JOURNAL

VOLUME 56, NO. 1

JANUARY 1973

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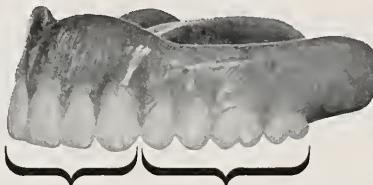
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# North Carolina DENTAL JOURNAL

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Expressions of opinion and statements of supposed fact are the author's and should not be regarded as views of the North Carolina Dental Society.

# The Calf Path

(EDITORS NOTE: This poem depicts vividly the pathways of life that we so often follow. Perhaps if we learned from history we could not repeat mistakes.)



One day, thru the primeval wood,  
A calf walked home, as good calves should;  
But made a trail all bent askew,  
A crooked trail as all calves do.

Since then two hundred years have fled,  
And, I infer, the calf is dead.  
But still he left behind his trail.  
And thereby hangs my moral tale.

The trail was taken up next day  
By a lone dog that passed that way;  
And then a wise bellwether sheep  
Pursued the trail o'er vale and steep,  
And drew the flock behind him, too,  
As good bellwethers always do.

And from that day, o'er hill and glade,  
Thru those old woods a path was made;  
And many men wound in and out,  
And dodged, and turned, and bent about  
And uttered words of righteous wrath  
Because 'twas such a crooked path.

But still they followed—do not laugh—  
The first migration of that calf,  
And thru this winding wood—away stalked,  
Because he wobbled when he walked.

This forest path became a lane,  
That bent, and turned, and turned again;  
This crooked lane became a road.  
Where many a poor horse with his load  
Toiled on beneath the burning sun  
And traveled some three miles in one.  
And thus a century and a half  
They trod the footsteps of that calf.

The years passed on in swiftness fleet,  
The road became a village street;  
And this, before men were aware,  
A city's crowded thoroughfare;  
And soon the central street was this  
Of a renowned metropolis;  
And men two centuries and a half  
Trod in the footsteps of that calf.

Each day a hundred thousand rout  
Followed the zigzag calf about;  
And o'er his crooked journey went  
The traffic of a continent.  
A hundred thousand men were led  
By one calf near three centuries dead.  
They followed still his crooked way,  
And lost one hundred years a day;  
For thus such reverence is lent  
To well-established precedent.

A moral lesson this might teach.  
Were I ordained and called to preach.  
For men are prone to go it blind,  
Along the calf paths of the mind,  
And work away from sun to sun,  
To do what other men have done.

They follow in the beaten track,  
And out and in, and forth and back,  
And still their devious course pursue,  
To keep the path that others do.

But how the wise old woods could laugh,  
Who saw the first primeval calf!  
Ah! many things this tale might teach—  
But I am not ordained to preach.

—SAM WALTER Foss (1858-1911)

# EDITORIAL



The first ink to dry should be that in praise of Benjamin Rives Baker and the splendid service he did for the North Carolina Dental Society as Editor-Publisher for three years. Dr. Baker's journalistic talents were recognized at a recent Ohio State University Journalism conference sponsored by the Council on Journalism of the American Dental Association. Dr. Baker's January 1972 editorial entitled *Concern for the North Carolina Dental Society* was duplicated and furnished to each member attending the seminar. This observation made me very proud of our state, our editor and, our Journal.

We are pleased to bring a new format of the Journal to the membership of the North Carolina Dental Society. The idea of this new format has been endorsed by members across the state and enthusiastically supported by the Executive Committee of the North Carolina Dental Society.

A state that boasts quality dentists as does North Carolina who rally to every need for the improvement of dentistry, who support and continue to support one of the finest dental education facilities in the world and, who rank high nationally among dentists in income level should support and possess a superior journal in cover and content. The Journal is a showcase of dentistry in North Carolina and of the North Carolina Dental Society. It abides on health science library shelves throughout the world depicting dentistry in our state. Your Journal should be a forum for us to express ourselves to each other and to the world.

It is evident and justifiably true that dentists of North Carolina possess pride in their profession. We should, for it has been good to us. We have pride in our state and its heritage as well, for it is a great place to work in service to the people and a great place to enjoy the abundance of life.

Although we have done much for the people of this state and nation, we must explore ways and means to deliver more and better dental health care to our people. If there is no crisis in dental health care delivery now; we must be prepared to meet the crisis if it arrives. This is the beat heard across the state from the great Nantahala Valley to Hatteras.

There are always a few in any society or profession who are afraid or unwilling to meet the challenge or who lack vision. There are always a few who dislike and are unwilling to make change, fear what progress may bring, and are unmindful of the opportunities and challenges that lie ahead. A headline in a local newspaper, regarding an address of a federal employee to the attendance of a district meeting, gave this headline on an inside page: The headline read: *The Trust Buster Faces the Cadillac Crowd*. The article opened describing the pomp and glory of the setting of the meeting. Now is this our image—*The Cadillac Crowd*? Not bad and perhaps well deserved, and agreed upon among most of us that we have earned our economic status through time and hard work. But will that image destroy our potential ability to control the practice of our profession? It may well do so if we become unmindful to our people's dental health needs. We have known of their needs for generations and labored to make their dental health needs known to them, and are just beginning to get the message through. Now the time has arrived to prove if we can produce these health services.

Dentistry is a great profession, in our great state of North Carolina, and it is ours today. Tomorrow?

I sincerely appreciate your confidence as expressed in support of my appointment as your Editor. This is your Journal, and you should complete the questionnaire on page 34 now and mail it. You can have the kind of journal you want, but you must express yourself. Your editor hopes you like the new format and that all of us working together can continue to improve it with each forthcoming issue.

Finally I wish to thank the Executive Committee and Andy Cunningham for their comradeship in support of our efforts in this new adventure. Alma Nesbitt's enthusiasm and valuable secretarial assistance have been of immeasurable value. To Mario DeLeon for his ideas in help and design, thanks. To Sandra Dowd, we are grateful for her talents in the art work. Appreciation is given to Tom Edwards and Rick Roberson for photography and cooperation.—RJS

# GUEST EDITORIAL



JOHN M. FAUST, D.D.S.\*

## The Importance of a Good State Dental Journal

Every article, pamphlet, book, or journal is written, composed or published with a specific purpose in mind. It is prepared with the hope of communicating this objective to the reader. The objective of a dental journal is to promote the art and science of dentistry. This is a most important and challenging objective because the journal of any dental organization will act as a mirror. It will, to a large extent, reflect the character, strength, and progressiveness of that organization. Weak associations beget weak journals, while strong, progressive associations beget strong journals.

To promote these strong journals, the American Dental Association Council on Journalism, with the help of the journalism faculty of The Ohio State University, annually holds journalism conferences and workshops. It is their purpose to upgrade all facets of dental publications throughout America.

What benefits are derived from good state dental journals? The journal, by communicating current issues facing the profession to dental society members, enables the individual members to become better informed about national problems, as well as the program and policies of the Association. It makes the member more aware of the meaning and the significance of the Association, and enables them to understand how the local Association is related to the American Dental Association.

The journal gives the average members a feeling of belonging, and helps them become more active and effective participants in the programs of the Association. It proves to them that the Association is interested in them as individuals, and not merely as payers of dues.

How is all this accomplished? It is accomplished by

communicating. To be an effective communicator, the journal must serve the interests of its readers.

Frequently, the only source of continuing education with which some dentists come in contact is their dental journals. By presenting articles in an attractive and interesting manner, a good journal encourages the dentist to read, study, and thus develop knowledge and skills by self-education.

In the field of public relations, a good journal plays an important role in promoting dentistry by publishing articles that deal with the important dentist-patient relationship. It also puts emphasis on those activities outside the dental office, such as community and civic responsibilities.

The good journal will also act as a forum for members' opinions on all topics, as well as a means of communication between officers and members. Here, the Association's policy and problems are outlined to the membership, along with any national trends that may affect dentistry. It is here, too, that the articulate members contribute very appreciably to the Association by expressing their thoughts and ideas on the Association's activities or problems facing the profession.

Next, by its editorials, the good journal starts the members to thinking by initiating discussions that are for the betterment of the profession. Its editorials also give expression to the opinions of the inarticulate member by assuming the role of mouthpiece through which he speaks.

Truly, the journal does much to advance and promote the art and science of dentistry. It also helps the Association in its efforts to properly represent the individual member. If the Association is to continue to do this, all lines of communication must be open. Certainly, one of the most essential communications links is a good state dental journal.

\* Dr. Faust is ADA Trustee from the Fifth District. He practices in Hattiesburg, Mississippi.

# PRESIDENT'S REPORT



I am excited over Jack Shankle's ideas and plans for the JOURNAL. He is bringing to his job as our new editor a sense of purpose and enthusiasm which promises us a journal which is attractive, informative, and vital. I am sure that Jack will be interested in your response to this and future issues. Let him know if you like the type of job which he is doing.

Betty and I enjoyed attending the district meetings in the early fall. We appreciate all of the many courtesies which were extended to us at each meeting. I was pleased at the almost unanimity which was shown in discussions on the experimental work in expanding the duties of our auxiliaries. It is my feeling that the dentists of this state, with few exceptions, are anxious to explore valid methods to implement expanded duties for auxiliary personnel, both assistants and hygienists, in order that we, the dentists, can more effectively meet the needs of the citizens of the state.

I would like to commend the various committees who are so diligently carrying out the work of the North Carolina Dental Society. It is impossible to record the many hours spent by our committee members in correspondence, telephone conservations, formal and informal meetings and overt action in performing the tasks which they have assumed. It is gratifying to know the excellent job that so many in our state are doing for organized dentistry.

Darden Eure, Jr., our general chairman for the May 13-16, 1973 Annual Meeting in Pinehurst, is meeting with the Annual Sessions Committee this month at Pinehurst to finalize

some of the details for the 117th Annual Meeting. We have outstanding clinicians presenting programs which you certainly will want to attend.

We are glad that so many North Carolina dentists and their wives were able to attend the American Dental Association meeting in San Francisco, October 27th-November 2nd. It was good to see many of you in the North Carolina hospitality room at the Fairmont. The North Carolina Delegation felt that it was most worthwhile to have a room where our people from North Carolina could meet with guests from the other states in the Fifth Trustee District as well as with dental leaders from throughout the country.

To me one of the most significant pieces of legislation accomplished in the House of Delegates was the passage of Resolution 31 popularly known as the Louisiana Resolution. It is now a part of the By-Laws of the American Dental Association and will protect the interests of the practitioners of dentistry. This helps to put the American Dental Association in touch with the grass roots of dentistry again. There has been a growing concern that it had become too bureaucratically oriented.

I hope that many of you will plan to attend our House of Delegates meeting this spring. In the meantime, please call on me if I can help you in any way.

My best wishes to each of you and to your families for the New Year.

JOSEPH M. JOHNSON

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# LETTERS to the Editor



May I call your attention to Resolution No. 50 1971 H passed by the ADA House of Delegates. This appears on page 531 of the Transactions of the American Dental Association.

This resolution is directed to the inadequacies of Continuing Education Courses involving pain and anxiety control and the management of related complications.

Nitrous oxide courses taught, given or sponsored by North Carolina commercial houses with little or no emphasis on the management of complications should be questioned. The omission of Physiology and Pharmacology, is an example of such inadequacies in the course. The omission of basic information could place the Dentist that utilizes the background gained from these courses in a very precarious area of liability.

W. L. HAND, JR., D.D.S.  
NEW BERN, NORTH CAROLINA

Carpeting in dental operatories is thought to be a source for mercury retention with subsequent poisoning to dental office personnel.

Droplets of mercury and amalgam "dust" inadvertently escape from the operating site and lodge in the piling of the operatory carpet. It is questionable whether the more powerful vacuum cleaners are capable of removing this heavy metal.

At least one dentist in North Carolina has been found to possess mercury poisoning by urine scan and eye examination.

Perhaps the Editor of the *Journal* would keep a registry of similar cases and publish periodically the cases of contamination reported.

(NAME WITHHELD)

*It is not the policy of this Journal to publish anonymous letters; however, this one is appropriate and published without hesitation.*

*Yes, the editor will keep a registry of cases of mercury poisoning reported, and will publish it periodically. It is necessary to have negative reports following examinations as well.*

## Items of Interest

### PREVENTIVE DENTISTRY PLAN FOR NORTH CAROLINA

The North Carolina Dental Society has renewed its efforts to gain legislative approval for its Preventive Dentistry Plan.

Two years ago the leadership in the profession conceived of a statewide program, utilizing all known effective preventive measures to be implemented in an effort to achieve a significant reduction in the amount of dental disease in the citizens of our state. A hastily organized effort nearly achieved success in the 1971 General Assembly, but lost in the last of the session. In spite of that disappointment, some portions of the plan have been achieved to a limited extent through funds from other sources.

With additional time, the Plan has been refined and expanded to be more inclusive and potentially more effective. The general components of the program have wide support from leadership in the profession and there is considerable enthusiasm about the possibilities. One of the most difficult problems in submitting the program to the 1973 General Assembly was the lack of time available for any one person to spend in preparing detailed documents describing objectives of the program, details of implementation, and budget projections. Such information must be produced in written form in order that appropriate legislative bills can be drawn and introduced to the General Assembly with the support of proper documentation. It is also necessary to have a concise state-

ment written in lay language for use in educating members of the General Assembly to the purposes and benefits of the Plan.

Fortunately, the North Carolina Dental Society has been able to secure the services of Dr. Frank Law, of Bethesda, Maryland, to research and prepare the necessary documents. Dr. Law is an internationally recognized expert in preventive dentistry. He is retired from the United States Public Health Service and served on the faculty at the University of North Carolina School of Public Health for several years. He is now engaged in various research projects in prevention and free lance consulting. The North Carolina Dental Society has contracted with Dr. Law to provide the needed documents prior to convening of the General Assembly. Financial support for Dr. Law's services was obtained from the Dental Auxiliary Fund of the Dental Foundation of North Carolina. Proceeds from the Annual Scrap Amalgam Drive provide the money for activities supported by the Fund. Additional funds were received from the Division of Dental Health of the United States Public Health Service. The Division supports a wide range of activities throughout the country related to improvement in dental health.

All dentists in the state will be informed of the plan in detail and will be asked to support the legislative effort. If the Dental Society is successful in securing funds to implement the Preventive Dentistry Plan, the profession will have indeed made a major contribution to the citizens of our state.

# INFECTIOUS DISEASE HAZARDS

John R. Frick, D.D.S.

RESULTS of several surveys indicate that as many as 45 per cent of all dentists feel they have contracted infectious illnesses in professional practice.<sup>2</sup> Upper respiratory tract infections, especially colds and flu are most frequent, though 14 per cent reported hand and finger infections and 9 per cent cited eye infections.<sup>6</sup> The busy practitioner can ill afford the time and energy necessary to overcome these infections, most of which are preventable.

In this discussion, three areas will be reviewed: first, a few general principles of infectious diseases; second, the specific infections presenting the greatest hazard to the dentist; and, third, prevention of infection for the dentist.

Two of the important factors which determine the disease-producing potential of microorganisms are: 1) portal of entry and 2) number of invading organisms. The skin and the oropharynx are the most common portals of entry, although the intact integument is impervious to all but few biolog-

ic agents. Even these few unusual invaders may require a sub-microscopic injury before penetration. A large number of microorganisms is necessary for most biologic disease, although the susceptibility of the host and the nature of the infectious agent cause variations. For example: a non-vaccinated person is more likely to contract smallpox on exposure, and a single implanted tubercle bacillus may initiate disease.

Several physiological mechanisms function for protection. Mucous secretions in the respiratory tract, combined with ciliary action and the cough reflex, either expel organisms externally or guide them into destructive gastric acidity. Fatty acids and other secretions of the skin and proteolytic enzymes of saliva inhibit microorganism growth of many organisms. Having overcome the first line of defense, invading agents must contend with phagocytic cells, the process of inflammation, and antibodies which produce immunity.

Three groups of microorganisms present the primary infectious hazard

to dentists; 1) bacteria, 2) viruses, and 3) fungi. Of the bacterial infections, tuberculosis and syphilis present serious potential problems while non-specific upper respiratory tract and local skin and eye infections have a much greater incidence.

Infection with the *Mycobacterium tuberculosis* usually results from close contact of a tuberculin negative host with a patient who harbors this microorganism in his sputum. Since eighty-five to ninety-five percent of the young adults in the United States have not been infected with or inoculated for tuberculosis, this population is tuberculin negative. Tuberculosis is usually a chronic disease which occurs in two stages, primary and secondary. The primary state commonly involves the lower lobe of the right lung and its hilar lymph nodes (a Ghon complex). These infected foci usually "heal," and during primary tuberculosis the patient is non-infectious.<sup>8</sup> Post primary, or adult tuberculosis may occur soon or many years after the primary infection. This "reinfection" develops most often due to reactivation of healed lesions and may have an insidious onset. Most secondary tuberculosis is found in older men characteristically with a chronic cough. Any patient with a prior primary infection may potentially be sputum positive but have no signs or symptoms of clinical disease. It is estimated that every year a dentist will see at least one unknown tuberculosis patient. This is an incidence of one in every fifteen hundred patients.<sup>15</sup>

Oral lesions of tuberculosis are infrequent, a surprise considering the large number of patients with a sputum positive for *M. tuberculosis*. The tongue is the most frequent site of oral tuberculosis, although the cheeks, lips, palate, and periapical tissues may also be involved. These lesions frequently begin as small tubercles which break down to form ulcers: additional tubercles characteristically form about the periphery of the ulcer. Oral lesions are



Figure 1. Ulceration and crusting of syphilitic lesion

characterized by severe, unremitting, progressive pain. Preexisting trauma is usually thought to be the portal of entry. Differential considerations include chancre, gumma, traumatic and other infectious ulcers.<sup>4</sup>

Syphilis, like tuberculosis, may be in an infectious stage while presenting no signs or symptoms. However, in syphilis oral lesions often occur in all stages of the disease and are second in frequency only to the genital lesions. National surveys indicate that yearly infectious cases of syphilis probably exceed 70,000 — age and socio-economic class have a poor correlation with this incidence.<sup>4</sup>

Syphilis is highly contagious during the primary and secondary stages because the lesions contain large numbers of *Treponema pallidum*. Primary intra-oral chancres are usually slightly painful (due to secondary infection) and covered with a grayish-white film. Extra-oral portions of the chancre frequently have a brown-crusted appearance (Fig. 1). Painful swelling of lymph nodes draining the area is a significant diagnostic aid. Herpetic lesions may mimic a chancre, but the crusted surface of an herpetic lesion is usually yellow (versus dark brown of the chancre). The onset of the herpetic lesion is usually shorter and more painful. Lymphadenopathy is less common with herpetic infections. Six weeks to several years after the chancre, secondary syphilis develops. The secondary syphilitic lesion, the mucous patch, appears intraorally as a slightly raised grayish-white lesion surrounded by an erythematous base. Mucous patches occur frequently on the tongue, oral commissure, lips, and pharynx. Mild systemic symptoms, a continuous sore throat, and a general skin eruption may accompany the mucous patches. This cutaneous outbreak is a coppery red or ham colored macular or papular eruption, most prominent on the face, hands, feet, and genitalia, rarely with any pain or itching. The tertiary syphilitic lesion, the gumma, is non-infectious and may appear many years after the secondary stage, presenting most commonly as a necrotic lesion on the tongue and palate.

The incidence of accidentally acquired syphilis is higher in dentists than in any other professional group.<sup>4</sup> Chancres commonly develop on the left hand, especially the tips of the fingers, in those infected. Paronychia (in-



Figure 2. Herpetic paronychia (courtesy Dr. John F. Hasler)

flammation of the distal phalanx or nail) should be considered syphilitic until proven otherwise. These syphilitic lesions are usually less painful than those caused by pyogenic infection and are later accompanied by adenopathy at the elbow or axilla.

Many other types of bacterial infections are potential from common oral flora. In one study, 46 percent of the dental patients had positive oral cultures of aerobic pathogens, *Streptococcus pyogenes* and *Staphylococcus aureus* primarily.<sup>7</sup> Carrier states of diseases such as diphtheria are also well noted. The primary diphtheritic lesions, the pseudomembrane, is commonly found in the nasopharynx. Its firm adherence to underlying tissue differentiates this from moniliasis. In fact patients are likely to enter the dental office in early or late stages of practically every infectious disease. Bacterial infections ranging from finger or eye abscesses and cellulitis to full blown pneumonia are possible from patient contact.

Virus infections present a wide range of potential problems for the dentist. Smallpox, chicken pox, measles, and other childhood viral diseases may be in contagious stages while presenting no symptoms. Vaccinations and prior infections give most adults immunity to these common diseases, though rarely, adult infections may occur and be more serious than benign childhood bouts.

Herpes simplex virus was found to be excreted in the saliva of 36 percent of ward patients without cold sores at Philadelphia General Hospital.<sup>3</sup> Contact with unsuspected herpes carriers may lead to respiratory, finger, and eye infections for the dentist. Traumatic herpes is the infection of deep tissues by a virus-contaminated penetrating instrument, an infected dental explorer for example. Numerous cases of herpetic paronychia (herpes Whitlow) have been reported in medical and dental personnel (Fig. 2). A typical case would develop this way: finger punctures or lacerations infected with HSV would heal after a few days of discomfort. One week after injury, the affected area would again become inflamed and painful, and would develop multiple small yellow blisters. Local and axillary lymph nodes would become swollen and painful; fever may be elevated to 102 degrees F for a few hours. Three weeks post-injury lesions are usually healed, but recurrence is possible. Herpetic paronychia and traumatic herpes seem to be primary herpetic infections like primary acute herpetic gingivostomatitis and thus usually occur only in persons without antibodies at the time of infection. However, since the prevalence of HSV antibody in dental students is less than 50 percent, a young dentist is likely to develop this finger infection.<sup>3</sup> Typical recurrent herpetic ulcerations occur as punctate coalescing lesions on the gin-



Figure 3. Intraoral lesions of recurrent herpes simplex virus

giva or lip (Fig. 3). Oral cytology reveals epithelial cell changes including multinucleation and "ballooning" degeneration of nuclei.

HSV may also cause herpetic keratoconjunctivitis, a potentially serious eye infection. Primary lesions occur on the eyelids, while recurrent attacks are confined to the cornea as ulcers. Corneal ulcerations may persist for weeks, respond poorly to treatment, and with repeated attacks, threaten vision.<sup>8</sup> Burkes and others have indicated a need for herpes differentiation from hand, foot and mouth disease as they present similar oral conditions.<sup>10</sup>

Infectious hepatitis may also be passed from patient to dentist via contaminated instruments. Cuts and needle pricks contaminated by blood from infected patients are thought to be the most likely vehicles of transmission.<sup>5</sup>

Fungal infections are characterized by chronic suppuration, necrosis and fibrosis of lesions. Transmission is by inhaled spores or endogenous sources, as fungal diseases are not generally considered contagious.<sup>8</sup> Systemic fungal disease is primarily limited to debilitated persons or those taking drugs such as marrow depressants or antibiotics. However, local fungal infections may present a hazard to the dentist for several reasons: 1) These chronic infections have a very insidious onset, 2) fungi grow well in a moist environ, e.g. wet nail beds or hands, 3) many pathogenic fungi normally inhabit the oral cavity, e.g. Candida al-

bicans, Cryptococcus neoformans, and Actinomycetes.

*Prevention of occupational infection* can be accomplished in two basic ways: 1) maintaining natural body defenses and 2) decreasing exposure to infectious agents. The importance of proper diet, exercise and sleep cannot be overemphasized. Yearly physical exams, with tuberculosis Tine test and chest x-ray, should be used to insure ongoing health. Suspected exposure to syphilis should be followed by a serologic test for syphilis done weekly for six weeks, then each month for an additional year.<sup>4</sup>

The hands of the dentist and dental personnel must be carefully guarded against cuts, abrasions, and roughening. Microorganisms may need only a submicroscopic opening in the skin for invasion. Suggestions for hands include:

1. Soap should be germicidal though not harsh; often merely rinsing hands between procedures is an efficient way of removing organisms.
2. Wash hands with warm water, hot water may injure.
3. Scrub should be done with a soft brush to avoid abrasion.
4. Hands should be patted dry, not rubbed vigorously.
5. Use hand lotions several times each day.
6. Cover any cuts or abrasions with a finger cot or gloves.
7. Don't overtrim finger nails or damage cuticle.

The efficiency of respiratory epithelium function can be greatly increased by humidity control in home and office, particularly during the winter months. The winter "cold season" has a definite causative link with concurrent low indoor relative humidity.<sup>12</sup> Warming of outside air at 30 degrees F and 40 percent relative humidity to give 75 degrees F air will result in about 8 percent relative humidity. Respiratory epithelium needs 35-50 percent relative humidity for proper function. Dry air thickens mucus, decreases activity of the ciliated cells, and can cause cracking of the mucous membrane. This break in the flowing, protective mucus blanket increases susceptibility to respiratory infection. Proper humidity is especially important at home while sleeping.<sup>11</sup>

Humidity control may also decrease exposure to infectious agents. Compared with low (10-20 percent) RH, mid-range humidities (40-55 percent) cause much quicker death of airborne pneumococci, some staph and strep, mycoplasma pneumonia, influenza virus and many other potential pathogens.<sup>12, 14</sup> Aerosol droplet nuclei of bacteria may float in air for hours: good flow of air with 35-50 percent humidity will drastically reduce most airborne pathogens.

Other ways to decrease exposure to microorganisms would include:

1. Use a tongue blade and good light to explore a suspicious lesion.
2. Have patient use antiseptic mouthwash prior to any procedure.
3. Use water with the air spray to significantly reduce aerosolized microorganisms.<sup>1</sup>
4. Use a rubber dam for operative procedures.
5. Wear glasses and a mask while operating: a good mask (glass fiber with fiber diameter of 1 micron)<sup>9</sup> will reduce microorganisms inhaled to almost zero.<sup>13</sup>
6. Never touch eyes after handling contaminated instruments or contacting a patient; if eyes are contacted, prophylactically wash out eyes with a boric acid solution and an ophthalmic wash.

Close attention to oral lesions, signs, symptoms, and pertinent history can help the dentist avoid contact with in-

(Continued on page 25)

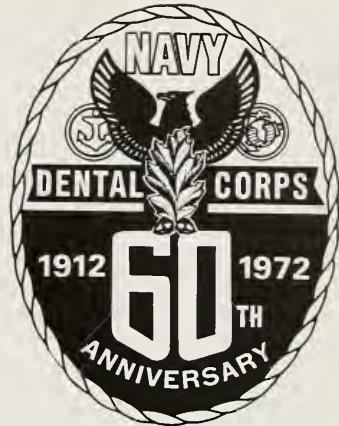


Edward U. Austin, D.D.S.

**EDITOR'S NOTE:**—The author, Edward U. Austin, D.D.S., is engaged in the private practice of oral surgery in Charlotte, North Carolina. He graduated from Emory University in 1944 and immediately entered active duty in the Dental Corps of the U.S. Navy. He has served in the Naval Reserve over twenty-eight years with additional active duty during the Korean War. At the present time he holds the rank of Captain in the U.S. Naval Reserve. In addition to his second career with the Navy, Dr. Austin has been very active in community affairs and in organized dentistry. He is Immediate Past President of the Southeastern Society of Oral Surgeons, a director and trustee of the American Society of Oral Surgeons and a member of the House of Delegates of the American Dental Association. He has served on numerous committees of the North Carolina Dental Society.

If you are reading this probably you are a dentist and you reside in North Carolina. These are fortunate circumstances in that society has permitted you an education that is above the ordinary, making you one of the more learned individuals in your community. Being a North Carolina dentist, you are probably a citizen of the United States. There are people around the world that are very envious of you for your nationality. They envy

# The Dentist and Dual Citizenship



you because you live in an affluent republic, and enjoy the greatest individual freedoms of all of the peoples of this world.

All of this did not just happen. We have a great profession, and we have the greatest thing that is known to man in the way of a responsible form of self government. These are gifts that were handed to us by our predecessors in the profession, and our forefathers who fought for this republic. Without some effort on our part it is possible that we could lose our professional prestige as well as our republic. With the educational opportunities accorded the professional man, society may reasonably expect that he add something to the body of knowledge rather than to continue irresponsibly. By the addition of a little knowledge from each of us, our profession can and will maintain the high prestige that it has among the professions and in the eyes of the general public. As a citizen of the United States each of us must make the necessary sacrifices to maintain this republic as our forefathers have bequeathed to us. This provides each of us with a dual citizenship. We must per-

petuate our profession and we must endow our nation.

One might ask at this point, "What can I do as an individual dentist for my nation?" You say that I vote in every election; I attend and participate in community affairs; I pay my taxes, and support my government. This is certainly true for most of us. However, over the years one of the methods that has been used to preserve our nation has been through the dual citizenship of participating in a reserve military organization. In the past history of our nation the reserve military organizations have come to the forefront when our democracy was challenged. The reservist has played an important role in our way of life and with the advancement of our republic from its beginning. In addition, the dental profession has kept abreast of the dental requirements of our military fighting forces. When necessary, the dental corps reserve has responded to the call of America in her time of need.

One method of helping to preserve the integrity of our profession and our nation is through the military reserve. By volunteering for this reserve status there are many advantages to the nation, the military branch of service, and to the individual. It is the purpose of this paper to bring forth knowledge to the individual dentist regarding the military reserve program. This will be presented in the vein of the Naval Reserve Program since the author is

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*"To be a reserve is indeed to be twice a citizen"*

—SIR WINSTON CHURCHILL

more familiar with this branch of the military having been active for twenty-eight years in the Naval Reserve Program.

The advantages to our nation in maintaining a strong military reserve are innumerable. Should the call be issued for military activation, it is essential that their dental needs be provided. The advantages to the military, of course, are quite obvious and will not be discussed in any length.

Once a dentist is commissioned in the Naval Reserve he has certain statutory obligations which must be fulfilled. He has a military obligation of six years. Five of these six years must be served in the ready reserve. The sixth year can be in a stand-by classification if he so desires.

On completion of the aforementioned obligation of service, the individual reserve officer has two options: (1) to become inactive (This course of action could result in commission revocation, discharge, or possible retirement without pay.) (2) to participate in the Naval Reserve Program, and by doing so he will obtain all the benefits of the reserve program including retirement with pay. This is the action of choice.

U.S. Naval Reserve participation offers the opportunity for an individual to continue his Naval association while pursuing civilian practice. The advantages of participation in the program are numerous to the individual. These can best be divided into two categories: (1) the present and, (2) later advantages. The present advantages consist of education and training for participating in the reserve program. This education and training is available to the individual not only from a professional standpoint but from the military standpoint as well. The reserve program offers the advantages of travel while taking active duty for training. The opportunity for promotion is available for those who serve with the reserve program. The annual medical check-up is an advantage that is available to the individuals who participate, and insurance policy benefits are available.

One cannot deny that the Navy fel-

lowship is an advantage to the individual dentist in providing a broad cultural background. The business and social contacts that are made through the Naval Reserve Program could be long lasting and of immeasurable value. Later in life the retirement pay which, at the present time, begins at age sixty can be shared with the family, and payments could continue long after the death of the participant. The cost of such an annuity policy through life insurance would be expensive. After the reserve dental officer retires he has the advantages of all U.S. Navy personnel such as family medical care. The officer is allowed to travel by U.S. military conveyance on "space available basis." With such an opportunity, it is possible for the retired naval officer and his wife to travel around the world. The retired naval officer has available, officers club privileges, exchange privileges and commissary privileges. When retired all military officers may have the full use of the military title and uniform.

Under the U.S. Naval Reserve Program there are basically two categories available for the Reserve Officer. These are the U.S. Naval Reserve-Ready and the U.S. Naval Reserve-Stand By. The individuals who sign a Ready-Reserve agreement are fully eligible for pay, retirement point credit, and for promotion. If an officer is to participate in the program it is highly recommended that he maintain an indefinite Ready-Reserve agreement with the Navy.

The basic difference between the reserve programs eludes to the recallability. The Ready-Reserve Officer is ready to be recalled at the pleasure of Congress or the President of the United States. Whereas, the stand-by can only be called by an act of Congress. The Reserve Officer who is concerned about recall and service to his nation should not be in the program. If an officer is participating in a reserve program he must not be blind to the fact that it is possible that he could be recalled to active duty. If he is to remain in the reserve program he should be in the program for the full advantages, and this can be best attained in

the Naval Reserve Program by being in the Ready-Reserves.

Next consideration is promotion in the Naval Reserve Program to the next highest rank since it seems that this is one of the key factors of retention in the Reserve Program. In the Navy, as with the advancement in any field, promotion is highly competitive. In the Naval Reserve the promotions to the next highest rank goes to those who have demonstrated by past performance that they are best qualified for high rank. The promotion zone, the maximum possible promotions, and the selecting board convening dates are set annually by the Secretary of the Navy. This board convenes and can select the number of officers so stated by an action of the Secretary of the Navy.

For us to maintain a strong nation it is necessary that we have a large number of citizens in a dual capacity. In order to maintain an esteemed profession, it is necessary that we have dentists who are willing and able to be twice a citizen. It is highly recommended for consideration by all eligible dentist. The loss of a reserve officer by discharge or commission revocation is an expensive move for our country, the service, and the individual. In the past years the loss rate of young officers has reached alarming proportions. It is recommended that every Naval Reserve Dental Officer consult the group command counseling board in his vicinity as to what is available in his area for the Naval Reserve Program. A strong reserve force is necessary for the defense of our great country. For our sake, and for the sake of future generations we must not shun this responsibility. The future stretches before America. Its people are not all courageous. Some have little faith in the future; some would strive to destroy initiative. Still the majority of its people are firm believers in the American dream. Is it not worth protecting? Such a question is worth pondering on this 60th Anniversary of the founding of the United States Navy Dental Corps.

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# BIOPSY

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**B**IOPSY of oral tissues is one of the most neglected yet one of the most useful diagnostic techniques available to the dentist. It has equal validity in proving a lesion cancerous or in diagnosing any of the numerous benign conditions found within the oral cavity. The first step toward diagnosing oral lesions is to obtain a pertinent history from the patient.<sup>1</sup> This may include a history of the lesion itself, a review of the past medical and dental history as well as a review of the family history. In dealing with the history of the lesion, one should ascertain when the patient first noticed the lesion and if there has been any change in size or appearance of the lesion since it was first noted. One should also ask if the lesion has caused any local symptoms such as pain, swelling or paresthesia.

In reviewing the past medical history, the general condition of the patient should be determined, including weight loss, fatigue, pain or swelling in any other areas. The patient's current diet, personal habits and medicines should also be reviewed.

A dental history should be taken to rule out the possibility that an ill-fitting prosthesis or restoration could be contributing to the problem. A history of complications from previous dental therapy may also be helpful.

One may at times inquire as to the patient's family history asking if parents, siblings, or children have had similar lesions.

After a thorough history, the next step should include an adequate examination of the patient's neck, face and

oral cavity. It is mandatory that one proceed in a systematic fashion, inspecting and palpating so that no area is missed.

A decision must be made as to what diagnostic tests should be utilized to aid in determining the nature of a lesion. In general one might state that if a definite diagnosis cannot be made clinically, biopsy should be considered. More specifically, the following conditions should warrant biopsy:

1. An ulcer without evidence of healing after 2 to 3 weeks
2. Persistent hyperkeratotic changes
3. Any exophytic growth
4. Any unexplained growth visible or palpable beneath normal surface tissue
5. Bone lesions not diagnosed by clinical, laboratory and x-ray findings
6. Any tissue surgically removed from the mouth

After the decision to biopsy a lesion, the question is raised as to who should perform the oral biopsy. By virtue of his training, any dentist should be capable of biopsying oral lesions, if he should desire to do so. If not, he should refer the patient immediately to someone who routinely utilizes biopsy in his practice. If after examination one is strongly suspicious of malignancy, the patient will best be served by immediate referral to a cancer center. "The dental practitioner will contribute little by performing a biopsy and may distort the lesion or delay urgent treatment."<sup>1</sup>

Basically there are two main types of oral biopsy:

1. Excisional Biopsy: Complete removal of the lesion surgically.

2. Incisional Biopsy: Surgical removal of a representative portion, but not all of the lesion.

The excisional biopsy is the procedure of choice whenever possible. Several factors such as size of lesion, accessibility of lesion, adjacent oral anatomy and the skill and experience of the dentist may determine whether an excisional or incisional biopsy is performed. As a general rule accessible lesions less than 1 centimeter in diameter can be excised.<sup>1</sup> Larger lesions, lesions with difficult access, and lesions located in critical anatomic sites are usually approached by incisional biopsy.

One should have a sterile biopsy tray ready for use containing the following items:

1. Gauze sponge
2. Local anesthesia
3. Needle and syringe
4. Scalpel and #15 blade
5. Tissue forceps
6. Hemostat
7. Scissors
8. Suture
9. Needle holder

If the biopsy is to include a bone specimen, certain additional items are required:

10. Periosteal elevator
11. Mallet and chisel or handpiece and bur
12. Curette

Local anesthesia should be administered by block or infiltration method; however, care should be taken not to inject directly into the biopsy site, as this will cause tissue distortion in an area critical to pathological examination.<sup>1</sup> Some investigators have suggested that one not use antiseptic dyes

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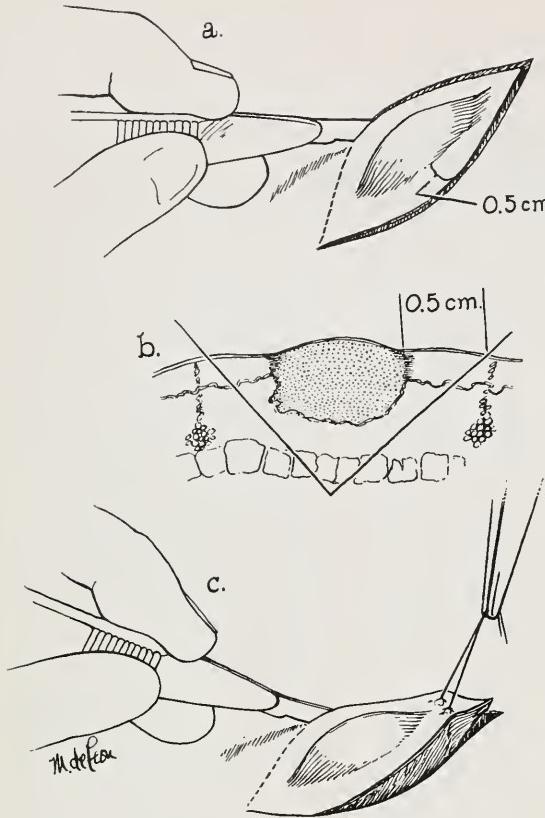


Fig. 1

such as iodine and mercurial preparations before injection of local anesthesia, as these may also distort tissues.<sup>3</sup>

With an excisional biopsy, one should attempt to make elliptical incisions around either side of the lesion as this type of incision facilitates closure. One should obtain borders of normal tissue approximately .5 centimeters wide around the lesion. This is easily accomplished with a #15 or possibly a #11 scalpel blade. One should excise deep enough to remove the entire lesion. This can often be facilitated by lifting up the biopsy site with tissue forceps or traction sutures through the lesion or preferably immediately adjacent to the lesion. (Fig. 1) At all times manipulation of the lesion itself should be gentle to avoid damage to the specimen. Tissues can be undermined, if necessary, and closed with interrupted 0000 black silk suture or other suitable suture material.

Before performing an incisional bi-

opsy one must determine what site or sites to incise. Generally these criteria should be met:

1. Wipe the area gently with a gauze sponge as this allows good vision and may remove any necrotic debris or epithelial desquamation
2. Avoid areas distorted by previous procedures
3. Avoid large necrotic areas as these reveal little of cellular detail
4. Include a sample of adjacent normal tissue with the specimen
5. Get a sufficient quantity of material (incision approximately 1 centimeter long x .5 centimeters wide x .5 centimeters deep)

Toluidine blue,<sup>3</sup> a dye which has been shown to selectively stain tumor cells and not normal cells has been used by many clinicians to help determine where to perform an incisional biopsy, especially if the lesion is extensive. A 2 per cent aqueous solution

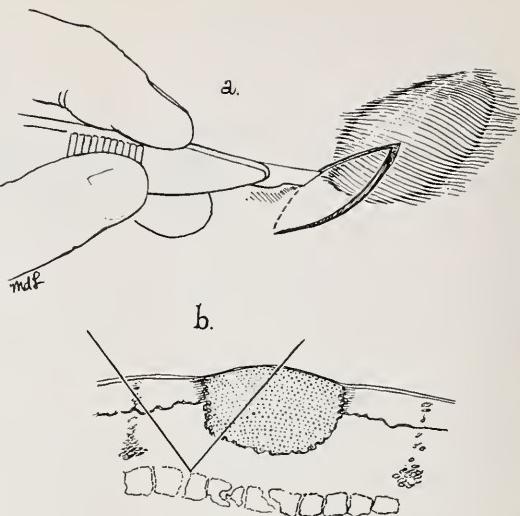


Fig. 2

Fig. 1: Excisional biopsy

- (A) Incisions should be made completely around the lesion with .5 cm. borders.
- (B) Incisions should be deep enough to completely excise the lesion.
- (C) Removal of the lesion may be facilitated by lifting up with traction sutures.

Fig. 2: Incisional biopsy

- (A) Obtain a sufficient quantity of material including a sample of normal tissue.
- (B) Incise deep enough to include underlying connective tissue.

of toluidine blue is applied to the area to be stained with a cotton stick applicator: after 30 seconds, the patient rinses his mouth with several mouthfuls of water to remove the excess dye. Examination will then reveal areas of carcinoma in situ and areas of infiltrating carcinoma to be stained a deep royal blue. Because mucin, food particles, purulent exudate and ulcers may pick up the stain, the test certainly has limitations.

One should then make elliptical incisions including a representative portion of the lesion as well as a sample of adjacent normal tissue. As with the excisional biopsy, traction to elevate the tissues may aid in obtaining not only epithelium, but some underlying connective tissue. (Fig. 2) The area can then be closed with sutures as before. If multiple areas are biopsied, each specimen should be placed in a separate bottle and a diagram should accompany the biopsies, indicating

from what position each specimen was taken.

Radiolucent lesions should be aspirated before biopsy with a 10 ml. syringe and an 18 gauge needle to preclude the possibility of a vascular problem. (Fig. 3) Assuming no large amount of blood is withdrawn during aspiration, a mucoperiosteal flap suitable for the area is reflected, exposing the cortical bone (if not destroyed) over the lesion in question. A small window is then made through the cortical plate with either handpiece and bur or with a mallet and chisel. If the lesion is relatively soft, sufficient material for examination can usually be obtained by using a curette. The mucoperiosteal flap can then be repositioned and sutured.

Post-operative medications following oral biopsies should be consistent with the extent of the surgery; however, a mild analgesic will usually suffice.

Hemorrhage should not be a significant problem in oral biopsies unless the lesion is extremely vascular or of vascular origin, and this determination can usually be made prior to biopsy. Vascular lesions are usually more reddish in color in contrast to the normal pinkish oral tissue; they may blanch with pressure; some vascular tumors can be felt to pulsate when palpated. As mentioned earlier, bony lesions should be aspirated prior to biopsy to rule out a vascular problem. These lesions should be referred to someone qualified to cope with attendant complications.

Once the specimen is obtained it should be immediately placed in a wide mouth bottle containing 10 per cent formalin and the bottle labeled with the patient's name. A form should accompany the specimen recording the following information:

1. Patient name, age, sex, race
2. Dentist, name and address
3. History of lesion
4. Clinical description of lesion
5. Other pertinent information, i.e. x-ray findings

The oral pathologist receives the specimen, processes it and examines it microscopically, and in conjunction with information supplied on the biopsy form, makes a diagnosis. The pathologist will then write or call the referring dentist to inform him of the diagnosis.

After performing the biopsy the den-

tist has the responsibility to observe the area for clinical healing or to refer the patient as indicated. When the lesion is reported as benign, the dentist should not forget that it is the clinical course of the disease not the pathology report that determines ultimate prognosis and if healing is not complete or if suspicious areas persist, a repeat biopsy is indicated. It is only after healing is complete that the process can be considered eliminated.<sup>1, 4</sup>

Any tissue removed from the body that is the least bit suspicious to the clinician should be submitted for histopathological examination. Patients today are cancer conscious and many

would seriously question a doctor who would deposit such tissue in a waste receptacle.

Any article on diagnosis of oral lesions and biopsy procedures could not be considered complete without a brief discussion of oral cytology and its relationship to biopsy. Despite numerous studies of oral exfoliative cytology, there is still much disagreement as to applicability and reliability. Cytological specimens are classified as follows:<sup>5</sup>

- Class I—No abnormal or atypical cells
- Class II—Atypical cytology but no evidence of malignancy
- Class III—Cytology suggestive of, but not conclusive for malignancy
- Class IV—Cytology strongly suggestive of malignancy
- Class V—Cytology conclusive for malignancy

Oral cytology has the potential for early detection of malignant lesions and its advantages are related to its simplicity of technique and reduction of patient apprehension. However, the following limitations noted by Bhaskar<sup>5</sup> should not be forgotten: (1) A biopsy gives a yes or no answer whereas cytology is reported as a range from I to V as listed above. (2) A positive smear indicates the presence of dyskeratotic abnormal cells. It does not differentiate whether these cells are from the epithelial covering or from deeper invasion of connective tissue; therefore, a pre-cancerous lesion cannot be distinguished from a frank carcinoma. (3) In keratinized lesions, the

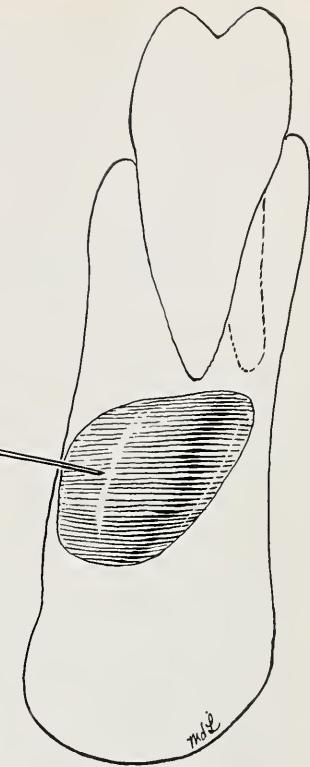


Fig. 3: Biopsy of bony lesion  
Bony lesions should be aspirated with an 18 gauge needle prior to biopsy to rule out a vascular problem.

smear may consist only of superficial keratinized cells and provide no information about the pathology of deeper cell layers. (4) Inflammatory lesions such as gingivitis may give a false positive result. (5) As a negative smear may give the clinician a false sense of security, false negative reports are a major cause for concern in cytology examination and reported rates have varied from 0 to 31 per cent.<sup>6</sup>

A positive or suspicious report from an oral cytology smear only indicates the need for a biopsy since final diagnosis and treatment cannot be determined on cytology alone.

Bhaskar<sup>5</sup> lists the following three indications for oral cytology:

1. For a patient who refuses biopsy
2. When there is extensive involvement of a lesion, one may use cytology to help decide where to perform a bi-

(Continued on page 25)

# DENTAL HEALTH FORMS

James H. Lee, D.D.S.

THE District Officers Conference was organized originally as a training session for district officers, committee chairmen, delegates, and those involved in, and charged with the responsibility of the state organization. It gives the official family an opportunity to meet with district leaders to convey programs before us, to discuss mutual problems, and thus enable our society to move forward in a smooth manner. The District Officers Conference has evolved as one of our most outstanding and informative sessions in the government of the state society. One of our leaders said, "I learned more about our society and its business at the District Officers Conference than at any other meeting."

Those of you representing your districts will have the opportunity to learn much from these sessions which may be disseminated to the district membership. Unfortunately, our district sessions are planned after our state meetings and much of this information is untimely when it reaches the general membership. Perhaps each district should consider an interim meeting so that the District Officers Conference could be even more effective.

Since January, 1970, members of the North Carolina Dental Society have been involved in Title 19. We should know by now that being prepared to render adequate dental service is not enough. Although our leaders attempted to prepare for this new program, we found that our preparations were very inadequate. As usual we were concerned with the "rendering of service." Apparently many concluded that if this were done properly, the other problems would be resolved fairly as expected. This was not the case. We have yet to have our Peer Review System approved by the Department of Social Service and the fiscal intermediary—Blue Cross. Yet when these co-workers in the program demanded a system of investigation by selected examining dentist we submitted to them virtually on their terms. We have provided the Fiscal Intermediary with a statement of understanding, and guidelines for the examining dentists as requested. Yet we have been unable to receive requested cooperation. We have seen a program that offered minimal comprehensive service cut to the extent that we are asked to restore teeth without removing infec-

tion. We are asked to treat patients without any chance of placing these patients in a position of being prepared to maintain the services. Yet the *PATIENT EXAMINATION REPORT FORM* requires, of the examining dentist, that he certify that services rendered are "of such standard as to provide the patient with maintainable and servicable dental health."

What does all this have to do with Dental Health Forms, Insurance, Health Programs and Medicaid? It relates to and involves our concepts and philosophies pertaining to current socio-economic patterns and how these concepts and philosophies have and will change our system of delivery of dental health care.

The American Dental Association House of Delegates in its 1971 annual session at Atlantic City in October adopted policies for *Guidelines for Dentistry's Position in a National Health Program*. All of you are urged to bring this document before your membership, local societies, study clubs, and other involved individuals. The guideline gives us the fundamental principle in the consideration of a national health program. The dental profession should take an active position in the design and support of a plan that includes a dental program that serves the needs of all people of this nation. The dental profession continues to be in opposition to any national health program that uses public funds to provide health care for persons who are financially able to pay for health services themselves. This principle governs all provisions and recommendations of the American Dental Association with respect to national health programs.

We must recognize our responsibility in these programs. It is not enough that we are prepared to render the mechanical service that has been expected of dentistry in the past. We must recognize that our private political philosophies must not prohibit the rendering of quality dental care to the recipients to the extent and intent of the comprehensiveness of

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**EDITOR'S NOTE**—The following report was made to the 1971 Annual District Officers Conference. The Conference voted to submit it to the membership of the North Carolina Dental Society for information purposes through the medium of THE JOURNAL.

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the program. Also, as dentists charged and licensed to provide dental care, we must insist on programs providing care at least comprehensive enough in coverage to allow us to prepare the patient to a level of care that can be maintainable.

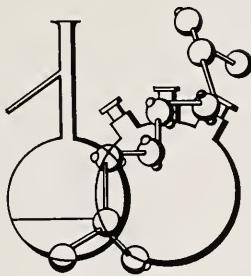
Our State Legislature permitted the reduction of the Title 19 dental coverages. For this elected body to be so uninformed about modern dentistry, is a reflection on every dentist and our State Dental Society. Our American Dental Association National Health Program Guidelines recognize this in the statement "The design and administration of a dental component of a national health program should take into consideration the differences between the delivery of dental care and other health services," and "Review in a dental component of a national health program should include review of *program design and administration*, quality of services rendered, fee questions, and utilization of services," and on the practical financial side, "The Association should conduct studies on how fees are determined, overhead cost, and on all forms of payment methods now known for the purpose of evaluating such methods in the light of a national dental health program."

In all programs pertaining to delivery of dental service, from now on, we must insist that dentists decide the extent and priority of care BEFORE we, as an organization, participate. We should be prepared to allow our society to represent us and our society should be prepared to accept this responsibility.

All of us are faced with the problem of accidents and related insurance coverage. In the case of school accident policies it is a lack of adequate coverage. We recently surveyed 24 communities from Asheville to Washington regarding school accident policies. The cost of coverage for 24 hour and 12 months was \$14.50-\$18.00 whereas school time coverage cost was only \$2.25-\$3.75. Dental coverage is very limited. Ten policies are limited to \$50, and 11 policies to \$100 per injured tooth. All but one required injured teeth to be sound and natural to be eligible for coverage. Two policies by one carrier do not indicate sound and natural limits on policy information sent to parents but the reporting form requires this information. It would appear that once the report is submitted lack of sound and natural becomes a reason for denying claim. It would also appear that our past aims of restoring diseased teeth to beauty, health, and function really serve no purpose as recognized by the insurance companies. In accident coverage at least one company defines the situation in this manner: "A sound natural tooth is deemed to be a natural, functioning tooth free of decay." They go on to say, "We do not cover the dislodging or breaking

(Continued on page 30)

## The First Few Years:



# inside dental research

ANDREW D. DIXON, M.D.S., Ph.D., D.Sc.

THE Dental Research Center was dedicated exactly five years ago and this seems an appropriate time to review the nature and extent of the considerable progress which has been made with the research programs at the School of Dentistry in Chapel Hill. Less than ten years ago, when advanced planning for the Dental Research Center had reached a critical stage, six members of the faculty represented the nucleus of the future research staff. Although it was estimated at the time that the number of persons involved would be considerably more than this, with an annual operating budget in excess of \$1 million, few of us could foresee the precise source of material wealth to support such an effort or that the goals would be achieved within five years of the completion of the research facility. Our research staff, including supporting personnel, numbers 100 during the present academic year, with a research budget of \$1.7 million. Essential to this large program are the facilities of the Dental Research Center, conceived by our first dean, Dr. John C. Brauer, and so magnificently supported for construction costs by the members of the dental profession throughout North Carolina.

The first descriptive brochure about the Dental Research Center commented: "It is possible that it might be worthwhile to re-orient a portion of the research effort in the direction of a research program. That is, a certain portion of the collective research effort would be directed towards an attack on one of the broad, major areas of inves-

tigation." A series of circumstances at the national level did indeed determine that our best interests would lie in the realm of programmed research, specifically in craniofacial growth and development.

In the early 1960's the concept of a small number of federally supported, University based dental research institutes or centers was developed by the National Institutes of Health. A detailed and critical survey of dental research and education in the United States had emphasized that the field of dentistry lagged behind other health sciences in its attention to biological research. The Congress gave enthusiastic endorsement to the establishment of a small number of dental research institutes and centers in selected universities, to approach the problem more vigorously than might be possible through traditional individual project grant mechanisms. Congressional action set aside a separate budget which identified additional funds for this specific purpose.

The National Institute of Dental Research at Bethesda, Maryland developed guidelines which state that this new approach to oral health research must enlist the collaboration of all appropriate elements of the University, with a major objective to broaden and strengthen the scientific base which underlies the national capability to improve oral health. To this end, the Centers are required to build on and extend existing institutional research strengths, provide for multi-disciplinary efforts and facilitate the collaboration of a wide range of scientists in the study of oral health problems of common interest.

Because the expanded facilities for research at our School were in the process of construction we were able to demonstrate to the appropriate funding authorities that we could mount a major research program. Under competitive circumstances, we were fortunate to be identified in 1967 as one of five Regional Dental Research Institutes or Centers established throughout the nation. The other programs are at the Universities of Alabama, Pennsylvania, Michigan and Washington at Seattle. It is appropriate here to quote from opening remarks at a national conference on growth and development organized by the research staff during January, 1971 in Chapel Hill. Dr. Seymour J. Kreshover, Director of the National Institute of Dental Research, commented, "The wisdom of the choices made in the early negotiations is perhaps most dramatically emphasized by the success achieved in so short a time by the University of North Carolina Center. Here you have assembled an impressive program of research conducted by a talented group of investigators. In the field of dentistry these institutes must serve as national resources. The area of research emphasis which North Carolina has selected is one of great complexity and challenge. It has chosen well, both in terms of competence and need."

It was our belief that the U.N.C. Dental Research Center Program should take advantage of and extend existing research strengths, using an interrelated and cohesive approach within specified areas of research. During these initial years, our research has concentrated on a greater understand-

\* Associate Dean for Research and Director, Dental Research Center, School of Dentistry, U.N.C.

ing of aspects of growth and development of the craniofacial region. Teams of investigators were formed whose interests encompass neural mechanisms, mechanisms of mineralization, speech mechanisms, immunological mechanisms, growth mechanisms, biomaterials and hemostasis research. More specifically, the neural mechanisms group seeks to develop effective means for the control of oral and facial pain, based on more basic studies of the trigeminal sensory pathway. The role of mineralization in the formation of the hard tissues of the craniofacial region provides opportunities for applied studies of tooth and bone formation. The growth and speech mechanisms groups are particularly interested in improved approaches to the treatment of the cleft palate individual. The immunology group has launched an applied research program in periodontal disease and aspects of tumor immunity, interacting with the staff of the hemostasis group who have considerable interests in tissue transplantation and wound healing problems. The biomaterials research staff is investigating the tissue compatibility of various polymers and the acceptability of other dental restorative materials. Now that the basic research thrusts of the program are on a solid foundation the clinical or applied aspects of the research will receive considerable emphasis in the coming years.

It would be impossible to review all the achievements of the research staff on this occasion. Through the courtesy of your editor, Dr. Robert J. Shankle, individual research areas will be described in forthcoming issues of the JOURNAL. In this way we hope to communicate to you some of the important contributions to our understanding of oral health problems. Of particular interest will be the accounts of the clinical evaluation of composite restorative materials by Dr. Karl Leinfelder, etiology and treatment of cleft palate by Drs. Gary Smiley and Ralph Latham, the direct effect of vitamin D on bone by Drs. Gerald Mechanic, Svein Toverud and Warren Ramp. Other studies of equal importance include transplantation studies for the correction of clotting defects by Dr. William Webster and clinical studies of the mechanisms and the control of craniofacial pain by Drs. John Gregg and Jeffrey Mazza. Through these efforts the staff of the Dental Research Center is

attacking several problems directly appropriate to the five year plan "Target for the 70's" of the National Institute of Dental Research for optimum development of the nation's dental research effort.

Although the primary function of the research staff must always be the conduct of scientific investigation, they are enthusiastic in their desire to be involved in the educational activities of the School and University. Through their affiliations with basic science and clinical departments and their membership of the graduate school faculty, they contribute in a significant way to educational programs of the University. Specifically, the research faculty plays a major role in the new D.D.S. curriculum, including instruction for microscopic anatomy, biochemistry, microbiology, pharmacology and immunology. Several of the staff have primary responsibility for a number of these courses. In addition almost all of them are involved in the Oral Biology program for D.D.S. students and they are playing a significant part in the offering of elective courses during the third and fourth years of the curriculum, attempting to better relate the biological sciences to some of the important concepts and problems faced in clinical dentistry.

The research staff is increasingly involved in research training activities of the School of Dentistry and other University components, acting as research advisors for students completing clinical specialty or Ph.D. requirements. Opportunities for further research training and experience are provided for young scientists, graduate students from the School of Dentistry and Medicine, as well as selected dental and medical students. A dental student research fellowship program supported

by the Pfeiffer Foundation has been in operation at our School for several years and 20 dental students were involved in our research activities during the past summer. The research staff has developed a research training program leading to the Master of Science degree in Oral Biology and, recently, we established a new training program in basic sciences leading to the Ph.D. degree, with emphasis on oral health problems. Consequently, we offer research training at all levels, from the pre-doctoral student who wishes to enter the dental research field directly without dental training, to the dental graduate who seeks essential post doctoral training for involvement in sophisticated clinical research programs in a dental school or similar environment.

Hopefully, this resumé of the research programs at the School of Dentistry will serve to set the scene for future articles which will pay attention to specific aspects of our programs. It is impossible here to convey adequately the importance of these programs to the School and University or the level of achievement attained by everyone involved in this group effort. On the other hand, it is a pleasure to have the privilege of communicating these preliminary thoughts to you and to assure our colleagues that we will continue to meet the challenge to make contributions to the enhancement of the profession and the solution of major oral health problems. Last, but not least, we extend a most hearty welcome to visit our facilities when you are next in the Chapel Hill area.

ANDREW D. DIXON, M.D.S., PH.D.,  
D.Sc.  
Associate Dean for Research and Director, Dental Research Center, School of Dentistry, U.N.C.

## DENTIST'S IMAGE VASTLY IMPROVED IN PAST 25 YEARS

The image of the dentist appears to have improved dramatically in the past 25 years, according to a comparison of three 'occupational status' studies, and in the following order:

Physicians, clergymen, dentists, judges, psychologists, college professors, psychiatrists, high school teachers, lawyers, law enforcement officials, TV news reporters, plumbers, executives of large corporations, U.S. Army generals, TV repairmen, newspaper columnists, auto repairmen, labor union officials, politicians and used car salesmen.

ADA leadership bulletin, Volume II, Number 14, July 10, 1972.

# STUDENT VIEWPOINT

Richard B. Davis  
F. Gene Grubb  
Robert A. Herrin

ONE of the most notable changes at the University of North Carolina has been the amount of time devoted to student research. During the academic year 1970-72 more than 70 scientific projects were carried out involving approximately 130 students. Several publications have resulted and students have presented papers at the International Association for Dental Research and N. C. Academy of Science meetings.

A wide range of subjects have been studied. Some examples are *Hormonal Influence on Behaviour in Brain Lesioned Rats*, *A Study of Aerosol Contamination of Operating Areas by High-Speed Dental Handpieces and Methods of Air Sampling*, and *The Use of the EKG in Determining Survival Times of Murine Cardiac Allografts*. Publications have appeared in such journals as *Physiology and Behaviour* and *The Journal of the Elisha Mitchell Scientific Society*.

Under the old curriculum student research was confined almost exclusively to Pfeiffer Fellowships. The new curriculum requires every student to pursue a project during his sophomore year, under the guidance of an established researcher. He may continue study of the project after the sophomore year if he chooses to do so. Often students elect to continue study during the summer vacation after the junior year.

With the current trend toward 3 year curricula at many institutions, often at the expense of student research, why has U.N.C. committed curriculum time in this area? According to administrative faculty, basic science laboratories during the old curriculum were intended to teach students "the scientific method." Unfortunately, material in labs such as biochemistry was "cookbook" and assimilated by rote memorization. A consensus grew among faculty members and students that time was not being well spent. Therefore, the current program was designed in which students might pursue independent study in a field of their choice, using less curriculum time than previous biological science laboratories. In addition to the expressed dissatisfaction with the results

of the conventional type of student laboratory in the basic sciences, a primary objective of the new in-depth laboratory is to give students some experience in the solving of problems in the basic sciences through the scientific method.

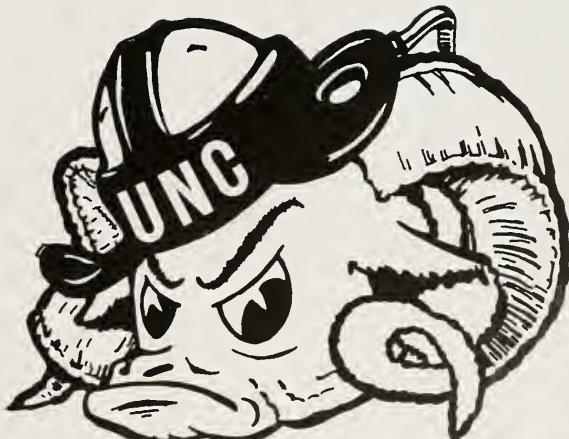
In addition to administrative commitment, another factor which has contributed to this increased student research is availability of the Dental Research Center and a fine research faculty. Total research funding for the Dental Research Center during the year 1971-72 was \$1,518,780.

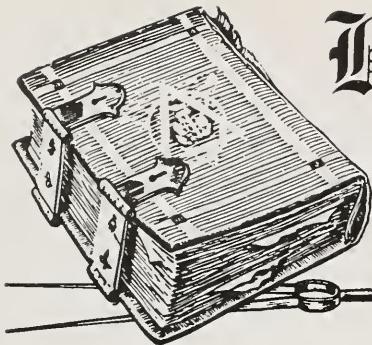
How do students and faculty feel about devoting curriculum time to research? In a survey conducted during 1971, a large majority of students participating in the program felt either there was a *right amount* or *too little* student research. Few students answered *too much*. Faculty project supervisors have returned very favorable responses. Many express difficulty in obtaining student researchers, due to a high demand for them.

It is our opinion, which is shared by

most students, that using the experimental approach in solving problems, and evaluating collected data to test the validity of a scientific hypothesis is vital to the student of the health professions. This can be especially evident in dentistry in light of the new emphasis on experimental problem solving as a tool of preventive oral medicine. Developing sound techniques in research methodology is fundamental to the experimental approach to problem solving, however, once these techniques have been mastered there must be room for creative scientific growth. It is felt that the objectives of the in-depth laboratory experience have been most satisfactorily fulfilled.

To taxpayers in North Carolina, the key issue is whether better dental practitioners result from such curriculum changes. A researcher's goal is careful study in an area to establish facts and principles. If this spirit is increased under the new curriculum, then a valid contribution toward quality dental treatment for the public will have been made.





# Book Reviews

**Oral Diagnosis—Oral Medicine.** Mitchell, D.F., Standish, S.M. and Fast, T.B. 436 pages, 390 illustrations. \$18.50. Lea & Febiger, Philadelphia. 2nd edition, 1972.

In the second edition of this basic textbook, the authors have only slightly modified and updated their excellent approach to oral diagnosis. Throughout the book, an approach to the understanding of disease processes is interwoven with practical information on signs and symptoms. The authors have included a large number of photographs which are excellent examples of clinical disease manifestations. The quality of reproduction enhances their usefulness as teaching examples.

One of the attractive features of this book is the organization of the subject matter. The authors have divided the material into four sections which are interrelated yet may be used independently. At the end of each chapter, an adequate bibliography is included should the reader be interested in further study.

Section I provides introductory material which is useful for students and an excellent review for experienced practitioners. Suggestions of examination techniques as well as rationale are given.

Section II deals with more comprehensive aspects of epidemiologic, genetic, radiographic, and physical diagnostic information. Clinical laboratory tests are included in this section with concise explanations of the abnormalities detected.

Section III presents numerous specific diseases. Although not all-inclusive, this section does place emphasis on detection, the basic disease process involved, and steps leading to a differential diagnosis.

Section IV involves subjects on patient management, including case analysis, and dento-legal matters. In a chapter set aside by colored paper for ready reference, management of dire emergencies is covered.

In summary, this is an attractive book because of the organization of the material and the exceptional quality and quantity of classic photographic examples of diseases. The practitioner may find it useful as a review of diagnostic techniques and to amplify his ability to make a differential diagnosis.

E. JEFF BURKES, JR.

**Synopsis of Medicine in Dentistry.** Lawrence Cohen. 194 pages, illustrated. \$9.50. Lea & Febiger. 1st edition, 1972.

Dr. Cohen prefaces his book, *Synopsis of Medicine in Dentistry*, by saying that before a dental student can complete an understanding of *Oral* medicine, he needs a broad background of the clinical manifestations of disease and treatment. Since few practicing dentists do not routinely treat patients with medical problems, he feels there is an urgent need for a book that discusses medical problems and their influence on dental treatment. He attempts this by mentioning underlying physiologic and pharmacologic principles and relates these principles to the clinical manifestations of disease and treatment.

He emphasizes the common medical problems, mentioning the rare entities only when they provide important physiologic or pathologic principles. He recommends using this text as a supplement to other sources; namely, movies and ward rounds.

The book is only 194 pages with the average length of the chapters being 12 pages. Pictures are clear and illustrative, although not numerous. The fifteen chapters are divided into anatomical systems; i.e. cardiovascular, respiratory, bones and joints, nervous and endocrine, plus five areas that do not fit into the anatomical scheme. These are infectious diseases, allergy and immune reactions, nutrition, head injuries, and drug therapy.

Most of the chapters are organized into introductory paragraphs with definitions, classifications, principles, and physiology pertinent to that area. The specific entity is compactly discussed by including etiology, clinical symptoms, laboratory findings, secondary complications, and treatment.

Especially noteworthy are the chapters on the cardiovascular system and diseases of the nervous system. Although not covered in great detail, a major number of important entities are mentioned including many of the latest theories concerning etiology and physiology.

As the author admits, this book is not to be used as a textbook for medicine, but it is recommended as a reference book for a needed differential diagnosis. It is concise, well organized, less than ten dollars, and would be a good addition to the office library.

RONALD KING

**The Dental Assistant.** Richardson, R.E. and Barton, R.E. 617 pages, illustrated. \$11.95. McGraw-Hill, 4th Edition, 1972.

The fourth edition of *The Dental Assistant* is an excellent text that dental auxiliary students and office personnel, as well as instructors and practicing dentists, will find to be an invaluable resource in auxiliary education. Within traditional text format the editors have updated the 3rd edition by deleting the obsolete, retaining the relevant, and including the latest information in response to changes in dental assisting practice, procedures and responsibilities.

Beginning with practice administration, dental terminology and applied psychology, the chapters progress to pre-clinical sciences (including oral anatomy, physiology, histology and pathology), dental materials, preventive dentistry and finally procedures in dental specialties. The glossary, appendix tables and improved illustrations combine with explicit, easy to read procedure guidelines to provide comprehensive, up to date foundation information for the dental assisting student. I would recommend *The Dental Assistant* as a valuable addition to any dental auxiliary's professional library.

LINDA KIMERLE

**Nutrition in Preventive Dentistry: Sciences and Practice.** Abraham E. Nizel. 560 pages, illustrated. \$130.00. W. B. Saunders, Co., Philadelphia. 1st edition, 1972.

Human dental caries and periodontal disease are multifactorial diseases; their management, therefore, requires several types of treatment used in concert. From an etiological standpoint, oral disease occurs as the result of an interaction between a susceptible host, bacteria, and food. The susceptibility of the host and the actions of bacteria are basically related to diet and nutrition from conception to old age. The author makes the point that neglect to give nutritional advice to a patient for improvement and maintenance of his oral health is as bad as neglect to teach plaque control.

The book has been written for all dental oriented personnel—students and practitioners—who are interested not in just talking but in really getting involved in doing something constructive about the nutritional status of their patients. This would be one phase of a total applied preventive dentistry service.

The style of writing has been kept simple; ponderous technical terms have been avoided and its message is aimed at the dentist who wants to know how he can incorporate into his clinical practice the use of diet and nutrition for the prevention and control of common oral problems.

The text is divided into three sections. The first deals with the nature of nutrients and their relevance to oral and general health. Its emphasis is on the physiopathological clinical states that are produced and identified where there may be an excess or deficiency of interrelated nutrients.

The second section provides basic facts about foods. An unusual chapter in this section is titled, "Questions Patients Ask About Food." Are natural sugars more healthful than refined sugars? Does pasteurization of milk destroy its vitamins? Will vitamins give me energy? Which sugar substitutes are currently considered safe? Armed with authoritative facts, the dental health team can dispel food myths and misrepresentations.

The third section is devoted to "how to do it in your office." With beautiful simple logic it leads the dentist through step-by-step methods for management of oral disease by nutritional counseling. It also stresses methods of communication and patient motivation. Other chapters in this section are

concerned with special areas of dental treatment such as applied nutrition in preventive periodontics and the nutritional management of the patient prior and post surgery.

The text contains four appendixes. Appendix I provides the nutritive values of foods in average servings or common measures. Appendix II classifies foods according to their food groups and the amount commonly considered to be a serving. Appendix III and IV give equivalent weights and measures and the average height and weight tables for children. All of these appendixes are invaluable for quick references.

This is an excellent text and reference book and has been long needed by the dentist because of its clinical relevancy.

W. R. STANMEYER

**Blakiston's Gould Medical Dictionary, Third Edition.** Arthur Osol, Chairman of the Editorial Board. 1849 pages plus 26 anatomical plates. Deluxe edition \$18.50; Flexible cover \$15.95. New York, McGraw-Hill Book Co. 1972.

This dictionary was first published under the title *A New Medical Dictionary—Gould* in 1890 and has been published in ten succeeding editions under several title variations, including the current edition, all bearing the name GOULD. It is one of several standard medical dictionaries in general usage.

The editorial board headed by Arthur Osol, President, Philadelphia College of Pharmacy and Science, is composed of a pharmacist, an histologist, an anatomist, a pediatrician, a pathologist, a dentist, and a cardiologist. This board utilized contributions from twenty-eight other individuals representing a wide range of medical and related sciences and including a number from the University of North Carolina School of Dentistry.

The preface describes several basic policy changes that were made in this edition. The most important change is the discontinuance of the custom of grouping phrase entries into general categories, as disease under *disease*, operations under *operation*, syndromes under *syndrome*, etc. Thus each entry is made on a straight alphabetical basis whether it is a single word or a phrase of two or more words. This avoids the necessity of searching for a term as a subentry under two or more categories.

Boldface main entries indicate word division alone and accent information is in a following separate pronunciation entry. Many obsolete or useless words have been dropped and many new words have been added. Over 75,000 words and terms have been defined.

There are 1691 pages of definitions; 134 pages of tables, including arteries, veins, bones, muscles, nerves, medical signs, and symbols, weights and measures, etc.; 26 anatomical plates, most in color; and detailed explanation of arrangement of entries, word division, pronunciation, etymology, and the management of preferred terms and synonyms.

The deluxe edition has hard covers compared to slightly flexible covers on the other edition but both are of good quality paper and clear printing and are thumb-indexed. The policy changes appear to be desirable and are consistent with general reference unabridged dictionaries.

It is difficult and perhaps unnecessary to make accurate comparisons of various dictionaries in this field but this new edition has the advantage of its current updating and its innovations gives it a freshness not commonly experienced in such staid tomes.

RICHARD E. RICHARDSON



# first district news

CAREY WELLS, D.D.S., EDITOR

The Green Park Hotel in Blowing Rock was the scene for the 51st annual meeting of the First District Dental Society. The attendance was afforded a beautiful Fall setting with ideal meeting facilities, courteous hotel staff, fabulous food and ideal recreation possibilities.

The first night's social was a cocktail party, buffet and dance. The latter function was marred by an automobile accident precluding the bands performance. Dr. Kenneth Ray and a local "tooth dentist" named Dr. Steve Floyd provided excellent piano and banjo music for the evening.

Saturday morning brought table clinics by Dr. John Bottoms, Dr. Benjamin Ellis, Dr. Bob Garron, Dr. James Elliott, Dr. Don Draper and Dr. Richard Bowling. Dr. Dwight Hord, Present-Elect, introduced a projected film program so well received that it may become a part of future First District programs.

The principal speaker for the meeting was Dr. Reuben Groom. His personality and informal presentation on practice administration made the Saturday and Sunday session a real learning experience.

President Ogden presided at the annual business meeting Saturday evening. "Turk" performed in his own inimitable

way and well managed the meeting and made the proceedings interesting.

New members inducted are as follows: Dr. Daniel Boyd, Waynesville, Dr. Joseph Dunn, Asheville, Dr. Darryl Nabors, Waynesville, Dr. Richard Garlitz, Hickory, Dr. Clyde Chapman, Jr., Hendersonville, Dr. Don Stepp, Asheville, Dr. Penn Waldron, Chapel Hill, Dr. Darrell Schrum, Dr. Douglas Wellons, Salisbury, Dr. James Weideman, Dr. Thomas Johnson, Jr., WNC Center, Dr. Lee Warren, Dr. Jerry Butler, Dr. Robert Hendrickson, Gastonia.

The luncheon meeting, with the auxiliary on Sunday, concluded the meeting. The feature of the Sunday meeting was the installation of officers: President, Dr. D. F. Hord, Kings Mountain; President-Elect, Dr. Joe Roberson, Asheville; Vice-President, Dr. Dick Belton, Gastonia; Secretary-Treasurer, Dr. Milton Massey; Editor, Dr. Carey T. Wells, Jr., Canton; Member of Executive Committee, Dr. Bob Litton, Member House of Delegates, Dr. Francis Buchanan, Hendersonville.

Attendance numbered 119 members, 42 guests, and 64 auxiliary members.

Dr. Richard Graham of Lenoir and his committee must be commended for their successful efforts in behalf of this meeting. Our district owes them a vote of appreciation.



Left to Right: D. F. Hord, President; Carey Wells, Editor; Joe Roberson, President Elect; Fred Ogden, Past President; Milton Massey, Secy. Treas.; Richard Belton, Vice-President.



Left to Right: Mrs. Litton, Mrs. Massey, Mrs. Reeves, Mrs. Taylor.



# second district news

James D. Blankenbeckler, D.D.S., Editor

The Second District Dental Society held its annual meeting in Charlotte on September 24 and 25 at the Holiday Inn North.

The principle presentation was "Motivation, Communication, and Patient Relations" by Allan J. Hurst of the Lawrence - Leiter and Company Management Consulting Firm of Kansas City, Missouri.

Mr. Hurst delighted his audience by both his humor and his quality of presentation. He spoke at great lengths about people and their feelings toward each other.

Projected clinics were provided by Dr. Stuart Fountain in Endodontics and by Dr. Ted Oldenburg in Pedodontics.

The President of the North Carolina Dental Society, Dr. Joe Johnson of Laurinburg, installed the newly elected officers: President, Dr. Keith Bentley of North Wilkesboro; President-Elect, Dr. William G. Ware, Jr. of Winston-Salem; Vice-President, Dr. Clarence Biddix of Charlotte; Secretary-Treasurer, Dr. Kenneth Owen of Charlotte; and Editor, Dr. James D. Blankenbeckler of Winston-Salem. Delegates to the North Carolina Dental Society were Dr. William Bean of Charlotte, Dr. Wallace Honeycutt of Statesville and Dr. Joe Stewart of Winston-Salem.

Other highlights of the meeting were a dinner dance on Sunday night and a Monte Carlo party on Monday night.

## INFECTIOUS DISEASE

(Continued from page 12)

fectious agents. Infectious lesions may take numerous clinical appearances and may be related to syphilis, tuberculosis, herpes or other easily transmitted disease. Coughs, fever, nasal discharge and malaise may be associated with a wide variety of infections and definitely call for a mask and often times, gloves.

Insidious exposure to pathogens calls for an effort that goes beyond an everyday glance. Use ESP—Examine, Suspect, Protect.

## EXAMINE:

1. Examine the history for disease hazards: tuberculosis, syphilis, infectious hepatitis, herpes, etc.
2. Examine the patient for symptoms: cough, fever, pain, malaise, etc.
3. Examine the patient for signs of infection: oral lesions, swelling, rash, etc.

## SUSPECT:

1. Suspect that pathogens are present in the oral flora.
2. Suspect that oral lesions may constitute an occupational hazard.

## PROTECT:

1. Use mask and glasses routinely while operating.
2. Use gloves if an open infection is suspected or if your hand has an open wound.
3. Have regular physical examinations.

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## BIOPSY

(Continued from page 17)

opsy by scraping several areas and then biopsying in the area that, according to cytology, shows the greatest potential for malignancy

3. For following patients who have been treated for oral cancer

The authors might also add:

4. As a screening technique for erythematous lesions which might not fit any of the conditions that warrant biopsy, listed previously. Oral cytology, therefore, can at times certainly be an adjunct to biopsy but cannot be considered a substitute for biopsy.<sup>5, 7, 8</sup>

In summary, the dentist has the legal right and professional responsibility to aid in the detection and diagnosis of oral lesions. Biopsy is a most necessary tool in meeting this responsibility.

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# third district news

Charles Surles, D.D.S., Editor

Have you ever been to a district meeting and heard eleven excellent clinicians, one of Nader's raiders and the republican candidate for governor? That's what happened at the Third District Dental Society's meeting at the Holdiay Inn Four Seasons in Greensboro, October 7-9, 1972.

The main clinician, Charles Jarvis kept the members laughing for two sessions of two hours each. His principle topic was "Life As A Dentist Can Be Filling." He stressed the importance of happiness in dentistry and explained his philosophy of practice—the happy approach.

The other ten clinicians were faculty members from the School of Dentistry. Each speaker had thirty minutes for his presentation. The time limit was carefully adhered to and each presentation was very informative. The idea of the ten "mini-presentations" was that of Leonard Cashion, president of the Third District.

Jack Shankle led the Sunday group with a talk on *Current Concepts in Endodontics*. The other presentations were as follows: Henry Murray, *An Approach to Repair of Porcelain Fused to Metal Restorations*; John Preece, *Radiographic Interpretation Fact or Artifact*; Matt Wood, *Overlay Dentures*; and Jeff Burkes, *Oral Cancer Detection*.

On Monday afternoon Doug Strickland led off with a talk on *Team Dentistry*. A test program is being carried on now at the University. Certified dental assistants along with

one hygienist are in the program. They are being trained to place filling materials in cavity preparations prepared by a dentist. The other presentations were as follows: John Casko, *Minor Orthodontic Tooth Movement*; Ernest Small, *Facial Pain*; Thomas McIver, *Nursing Bottle Decay A Dentist's Dilemma*; and Clarence Sockwell, *Composite Restorations*.

Alan Morrison, one of Nader's raiders, was the speaker at Sunday night's banquet. He graduated with honors from Harvard law school, is thirty-four years old, and makes \$15,000 a year. Morrison is the chief of the legal section of Nader's organization, *Public Citizens, Inc.* He formerly worked at the U. S. Attorney's office in New York and was the agent that was sent out to the Statue of Liberty to remove the protesters about two years ago. Morrison says that he is trying to make institutions more responsible to people. He wants to make the Congress more responsible to the bulk of the people, not special interest. He is currently investigating attorney's fee schedules.

Dr. Cashion addressing the members encouraged them to join the Delta Dental Plan. He also asked the new administration to continue to strengthen the ties between the Third District and the faculty of the School of Dentistry.

Jim Holshouser, the republican candidate for governor, spoke at the new members' luncheon on Monday.



Dr. H. V. Murroy lecturing



Members and wives enjoying Monte Carlo night



Front Row: Left to Right: Dennis Ellis, David Sullivan, Bill Barham, Douglas Fry. Back Row: Left to Right: Leslie Fowler, Wayne Moore, Kenneth Diehl, Ronald Stone, Stan Ford.

On Saturday afternoon Charles Horton moderated a forum on issues in dentistry today.

Saturday night was Monte Carlo night, featuring blackjack, crap and roulette tables. The evening was climaxed by an auction for door prizes at which the Monte Carlo Winners participated in the bidding. Mrs. June Stallings won a three day visit to Williamsburg for two.

Officers elected and installed for the coming year include: Joseph Suggs, President; Galen Quinn, President-elect; Wal-



Left to Right: Past President Leonard Cashion; Vice-President Walter Morris; Secy-Treas. Richard Fields; President Joseph Suggs; President Elect Galen Quinn.

ter Morris, Vice-President; and Richard Fields, Secretary-Treasurer.

Sixteen new members were elected and inducted:

Harrison Walker, Wayne Moore, David Sullivan, Kenneth L. Walker, Albert Zaytoun, William L. Barham, Ernest Small, Douglass S. Fry, Vincent L. Brooks, Edward H. Sayre, Jr., Stan Ford, Kenneth R. Diehl, Ronald R. Beshears, Leslie O. Fowler, Dennis W. Ellis and Ronald W. Stone.



# fourth district news

Richard Hunter, D.D.S., Editor

The Fourth District Dental Society had the largest registered attendance in its history for the annual program. Four hundred and fifty people were registered including dentists, wives, and auxiliaries. The meeting was held in the attractive Velvet Cloak Motel in Raleigh, October thirteen and fourteen.

Dr. H. Paul Jacobi addressed an overflowing audience. His dynamic presentation on practice management was well received by more than 350 dentists and guests.

A poolside cocktail party and buffet dinner was enjoyed by the dentists, wives, and guests on Friday evening.

A number of excellent table clinics were presented by members of the Fourth District on Saturday.

A golf tournament was held during the meeting and Harvie Hill won the trophy which was presented at the Saturday night banquet.

A casino party concluded Saturday activities. Each guest was given an equal amount of chips. After a couple of hours of fun at the various gaming tables (a simulated Monte Carlo), a lively auction was held for the prizes which were "bought" with the script which the guests had won.

President James H. Edwards presided at this annual meeting and the following new officers, delegates and alternate delegates for 1972-1973 were elected or appointed: President, F. G. Hasty, Fayetteville; President-elect, M. W. Wallace, Spring Lake; Vice-President, E. B. Ward, Whiteville; Secretary-Treasurer, N. B. Grantham, Smithfield; Editor, Richard S. Hunter, Raleigh; Delegates: G. L. Butler, Jr., Fayetteville, and J. S. D. Nelson, Raleigh; Alternate Delegates: William Keith, Elizabethtown, and B. K. Wicker, Maxton, J. R. Povlich, III, Raleigh, and R. D. Coffey, Jr., Raleigh.



# fifth district news

Garland Homes, D.D.S., Editor

Amid elegance, scenic beauty and an historical background overlooking the Cape Fear River and the Battleship North Carolina, the Fifth District Dental Society met in a new surrounding at the Timme Plaza in Wilmington, September 14, 15 and 16.

Willard Hinnant, aided ably by Wayne Atkinson, was in charge of arrangements. The first General business session was held Thursday evening. President James Privette delivered a moving and challenging address asking for required

continuing education, outlining a workable, functional and practical approach to this ever present problem.

Wayne Anderson presented the following new members to the district: Jim Corthay, Lyn Turner, Hilton Purvis, Jack Dudley, Jim McPherson, A. W. Tucker, Alan Traub, David Mays, Edward Price, John Picklesimer, Richard Gorman, Wiley Hines, Bill Weiss, and Jack Mullin.

An open forum breakfast held Friday, September 15, proved to be one of the highlights of the meeting. President Privette acted as moderator with Ferris Hoggard, Dean James Bawden, Roy Lindahl and President Joe Johnson as panelists. This event was so successful that it was determined to continue this format at next years meeting.

Dr. Frank Goodwin, Professor of Marketing at the University of Florida, was the essayist for Friday's program.

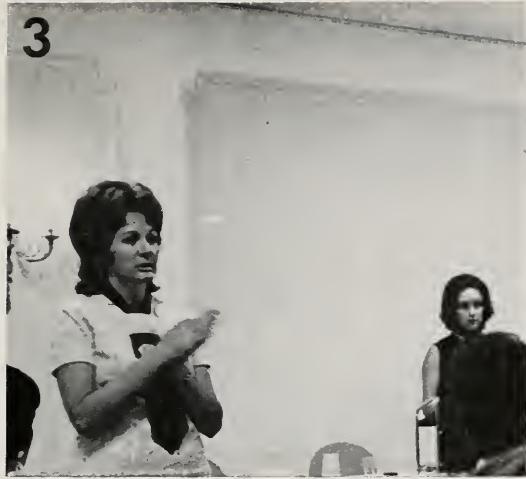


Dr. James A. Privette of Kinston, N. C., Delivering President's Address at 5th District Dental Society Meeting, Timme Plaza, Wilmington, N. C.



Dr. Frank Goodwin of Florida, Clinician at 5th District Meeting, Timme Plaza, Wilmington, N. C.

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Barbara Wilson of Wilson, N. C., Addresses Dental Auxiliary of 5th District.

Dr. Goodwin addressed a capacity crowd of dentists, wives, auxiliaries and guests.

Following a social hour on the Timme Plaza patio overlooking the Cape Fear River, the membership and guests enjoyed a luau banquet. Henry Aldridge acted as Master of Ceremonies with Wayne Anderson awarding special presentations to the ADA Life Members.

Projected table clinics were presented by "Skeet" Hesmer, Fred Miller, C. B. Smith and Jay Collie on Saturday morning.

At the final business session committee reports were given and officers for the coming year were installed. These are: William E. Kidd, President; David Freshwater, President-Elect; Darden Eure, Vice - President; Garland Homes, Sec.-Tres.; and Wayne Anderson, Editor.

Delegates are: Fred Miller, James Privette, William Kidd, Darden Eure, and David Freshwater. Alternate delegates are: Walter Linville, Wayne Anderson, Neal Trueblood, Hardy Coefield, and Woody Mason.

The Timme Plaza was selected again as the meeting site to be held September 13, 14, and 15, 1973.

4



New 5th District Officers: Left to right, Wayne Anderson of Jacksonville, N. C., Editor; David Freshwater of Morehead City, N. C., Pres.-Elect; William Kidd of Washington, N. C., Pres.; Darden Eure, Jr. of Morehead City, N. C., Vice-Pres.; Garland Homes of Washington, N. C., Sec-Treas.

5



Audience Listening to Dr. Frank Goodwin, Clinician, at 5th District Meeting.

## DENTAL HEALTH FORMS

(Continued from page 18)

of an artificial crown or filling. However, the fracture of a natural portion of tooth is covered, even though the tooth has a filling or an artificial crown."

With this definition *KNOWN* the reporting Doctor could be more specific in his description of the injured teeth and perhaps coverage would be obtained.

Another carrier, which handles several different company policies, defines sound and natural as "teeth that are free from cavity or cavity repair, and are not artificial, wholly or in part. (This definition varies in Georgia.) A letter to this company for an explanation of this difference has not been answered.

In New York, another company's definition refers only to natural teeth.

A midwest company states, "Most student policies provide benefits for injuries to sound, natural teeth. The term "sound, natural teeth" is intended to include teeth containing restorations or fillings and other treatments which functionally restore them to their original state. It does not intend to include teeth which are carious or in other pathological states."

One North Carolina company offers a variation of policies. Without seeing the Master Policy it would appear that their policy for school time coverage at \$3 is the best of those surveyed. It does not place a dollar limit on an individual tooth, only a \$350 Medical and Dental Expense Benefit limit. This is also the policy that does not specify sound and natural but requires this information on the report form.

There are some steps we can take to protect ourselves and our patients in these instances: A. The same applies to other insurance cases, those involved should be informed, preferably in writing, that your service is being rendered for: 1. the patient and not the insurance company; 2. A fee will be charged for preparation of forms; and 3. You are willing to cooperate in the preparation and submitting of forms but the full responsibility for the account is with the patient or parent. B. Obtain a copy of policy, and discuss it with the school principal, or agent. C. Make photographs for record purposes. D. Examination, radiographs, pulp testing, diagnostic models, pulp therapy, provisional and treatment restorations, are separate services and should be charged for. Full series x-rays should be made in all these cases as more than the obvious injury may be revealed. As these policies are on a per tooth basis, it is wise to indicate every tooth that is injured in any way. E. Each report should contain this statement, "Due to the nature of this injury, future care will be required. This injury is permanent in nature." F. The final restoration should not be indicated as

permanent. You could use, "These teeth have been restored by a porcelain to gold restoration" or "The permanently lost teeth have been replaced by a fixed restoration." G. Prepared written statements to the parents, informing them of the problem and the service to be rendered and the expected results, can be most helpful.

It is interesting to compare these accident policies with those offered in states with Delta Dental Plans. These plans offer full dental coverage for 1 year at \$2-3. Some limit prosthesis to \$250. Utah Dental Delta offers 100% coverage with no prosthesis limits for \$2.50 yearly. This provides 24 hour coverage with no limits as to football and interschool athletics. California Dental Service offers a plan at \$3 for 1 year, \$5 for 2 years, and \$7 for 3 years. None of these plans refer to sound and natural teeth. Perhaps our Delta Dental Plan could present a package that would be as attractive as these. If so, this alone would be worth \$50 to every Dentist in North Carolina—the amount being asked for joining the North Carolina Delta Dental Plan.

Accident cases involving insurance, such as car accidents, can present a variety of problems. A recent article in the November 1971 issue of *Dental Economics* by Dr. S. A. Gilberg, should be read and retained. His article is most informative and answers many questions, namely: (1) Cover yourself as previously mentioned regarding responsibility. In many instances you will need to compromise in this. The patient may not be able to fully commit to the required services unless you are willing to agree with them in dealing with the insurance companies, attorneys, and courts. (2) Obtain detailed history, clinical records, photographs, radiographs, and keep a most accurate record of procedures, as a printed assignment form to be submitted to insurance companies and attorneys is indicated. (3) Request the insurance companies to acknowledge the assignment form and to advise you if there are any questions prior to patients next appointment, and, inform the insurance company of the estimated care and fee. In case of a medical pay coverage, request the insurance company to advise you of the balance of the patient's account. (4) In the event the patient is represented by an attorney, it is wise to contact him and discuss the treatment involved. He will obtain a release from the patient allowing you to furnish him with reports which in many instances can be used to settle out of court. You should obtain from the attorney a written statement assuring you that your interest will be protected in a settlement or in a lawsuit. Usually, the attorney receives funds in trust and all expenses are paid by him prior to settlement with the client. (5) Do not submit reports to other attorneys or insurance

companies without patient's or attorney's permission. (6) Be prepared to submit a comprehensive report of your findings, treatment plan, treatment procedures, and an estimate of future care and fees involved. Remember the patient and the attorney are dependent on you for your professional judgement in reaching a fair settlement. (7) You are entitled to additional compensation for your efforts in behalf of the patient beyond the dental treatment rendered. This should be discussed with the patient's attorney and your attorney. If no attorney is involved, it should be discussed with the insurance company. (8) If it becomes necessary to go to court, you should consult with the attorney and/or your attorney as to what is to be expected.

We have several federally funded programs existing in most communities such as: Head Start, ESEA, and Follow Thru. In many instances these programs are planned, funded, and then Dentistry is informed. This is the time to pause and look at the program. Take time to become familiar with the dental aspects of each program. Obtain the necessary literature to become informed. Spend some time with the local officials and program workers and inquire as to what is expected of Dentistry. Head Start programs seem to have presented many problems across our state. It is suspected that most of these problems relate to a lack of understanding by the program directors, workers, volunteer workers, and the Dentist. A pamphlet "Project Head Start Dental Services—A Guide for Dental Health Personnel" can be a valuable service. This document can be obtained from Project Head Start, Office of Child Development, U.S. Department of Health, Education, and Welfare, Washington, D. C. 20201. Be aware, that this program recognizes that to be effective, adequate services must be included and that fees must be paid so that these services can be received. If your area program does not budget sufficient money for the dental phase, then refrain from treating until there is sufficient interest in dentistry to obtain the necessary funding. Some directors request dental exams for the children when no funds are available for treatment. This is not an acceptable philosophy of dental practice and displays irrational use of funds. Efforts will be made to use other funded programs such as the School Health Fund and Title 19 for the Dental Care of Head Start Children. These programs are very limited in the scope and intent of services, and it is very questionable if the requirements of Head Start are met. The manual states "Existing service programs need not be used by Head Start because they are free or inexpensive. If programs do not meet Head Start standards of professional quality and human dignity, Head Start funds may be used to purchase

# Another Dental Association

from

KENNTH A. REID, Historian, Niagara County Dental Society and Eighth District Dental Society of the State of New York

The *Niagara Falls Gazette*, in its weekly issue of Wednesday, August 10, 1859, reported on the Fifth Annual Session of the American Dental Convention as follows:

ANOTHER DENTAL ASSOCIATION — *We had supposed from what had been said in the dental journals within a few months, that an attempt would be made to change the Convention that met here last week into a representative body. A portion of the profession think that a mass convention, where all grades of dentists are admitted, is decidedly too plebeian — that the door is thrown too wide open; admitting quacks and those who confer no honor upon the profession. — Such a course, though talked of, was abandoned. A meeting was held at the International Wednesday evening, and a more formal one in Grant Hall, on Thursday. A preliminary organization was effected, a committee appointed to draft a constitution, and arrangements made for the first regular annual session on the last Tuesday of July, 1860, at Washington, to which time and place they adjourned.*

*We learned from conversation with the leaders in this movement, that the design is to make it more exclusively an association of practicing dentists, and where there will be less axes brought to grind. — Some of the most distinguished dentists attending the convention enlisted in this movement.*

The headquarters for the 1859 Dental Convention were apparently in the International Hotel, Niagara Falls, N. Y., with the general meetings being held in Grant Hall across the street. The International Hotel burned in 1918; the brick

more acceptable services from other sources."

In our area, we have seen some fine results from the Head Start Dental Program. The cooperation of the directors, staff, and workers and dentists has been excellent. The program provides aides to bring the children to the offices. Scheduling several children over a two or three hour period prevents the broken appointment problem and provides an adequate return for productive time. A thorough examination and preparation of estimates allows the local program to function within its budget.

For years we were told that nothing could be done about the deplorable situation existing with the Industrial Commission. The dentists of this state were completely at a disadvantage with this agency. However, our new chairman, has brought about an acceptable program that allows the patient to receive reasonably comprehensive treatment. We understand, it was a matter of someone taking the time to explain Dentistry's position and the need for modernizing the program. Perhaps the same solution could be the answer to our state agencies program. A dental program that prohibits prevent-

tion by the use of topical fluoride should be questioned.

Through the years we have seen the Veterans Administration program improve. When treating patients under this program and difficulties are encountered, a letter or phone call will usually be met with cooperation. As with most programs, the provisions for adequate periodontal care are lacking. We must make a concentrated and sincere effort to revise this phase of the program. Prevent additional problems and delays in payment by reading the instructions and submit your reports properly.

We must be prepared to work more closely with the consumer and recognize that he will have more and more voice in determining the course of the professions. The current North Carolina Dental Society Newsletter's reference to the New York Dental Society and the Attorney General's conference brings this into strong focus.

Federal health programs, various forms of insurance programs and state and community programs all are presenting new and challenging problems to the general practitioner. These call for constant reevaluation of your practice pro-

cedures and the required personnel. Dr. John Zapp informs us that future programs will reward group practices and, in effect, penalize the solo practitioner. We must learn to cope with these problems. For example, prepare a member of your staff to handle forms and reports. In many instances, a part-time worker will be efficient. Be familiar with the programs, the requirements, the codes, the services covered, be accurate in reporting and give adequate detail. Recognize that an uninformed person will be determining your payment based on their interpretation of your report. Check and audit your payments. Request an accounting if there is any question. You must report in detail so expect and require a detailed return. Keep adequate, effective, efficient records. Could you substantiate your present fees in the face of the current freeze? Utilize your camera and radiographs. All of these are important in maintaining a healthy, vigorous, progressive and pleasant practice. The problems will grow, will you? Dr. John Woehler said . . . "learning is an unlearning process."

The Niagara County Dental Society secured wood from Grant Hall when the building was destroyed. The stairway railing and spindles were found to be American Black Walnut from which gavels could be fashioned. It was decided that the American Dental Association and each state dental society should have such a gavel with the hope that these gavels would be made the official gavel of the Association and Societies. Each is an original by a local craftsman who turned the gavel head of most to conform with the original turning of the stairway spindles.



Wood from Grant Hall, Niagara Falls, New York, A.D.A. Birthplace—Aug. 3, 1859. Presented by Niagara County Dental Society—1972.

# North Carolina Dental Assistants Association

Betty Hensley

Eleven delegates represented the North Carolina Dental Assistants Association at the 48th Annual Session of the American Dental Assistants Association held at the Jack Tar Hotel, San Francisco, California, October 28 through November 1. The delegates were Mrs. Wilma Wilson, President; Mrs. Linda Heffinger, President-Elect; Mrs. Betty Scott, Vice President; Mrs. Cheryl Kearney, Secretary; Miss Aileen Croom, Immediate Past President; Miss Sarah Bizzell, Mrs. Jimmie Melton; Mrs. Barbara Talbert, Treasurer; Miss Bette Holmes, Mrs. Barbara Hester and Mrs. Janie Brown.

Mrs. Melton served as Chairman of the American Dental Assistants Association Legislation Committee. Among the 44 clinics presented was Mrs. Hester's first place clinic entitled "The Dental Assistant's Role in Preventive Dentistry."

A joint Educational meeting of the American Dental Assistants Association and American Dental Hygienists Association was held with approximately 500 attending. Presen-

tations heard were "The New Zealand Dental Nurse", "Prevention and the Control Nurse", "Implementing New Federal Legislation Affecting Dental Auxiliaries" and "Establishing and Accomplishing Your Objectives." Delegates also attended a Panel: "Today, Yesterday and Tomorrow With Expanded Functions" and many other programs including four House of Delegates meetings.

American Dental Assistants Association Officers installed for 1972-73 were: Bonnie Franklin, President; Claire Williamson, President-Elect; Frances Fox, First Vice President; Hazel Torres, Second Vice President; Muriel Burnett, Secretary; Edna Todd Bixby, Treasurer.

North Carolina won the second place Membership Certificate Award for the Association showing the largest numerical increase in membership since the close of the last membership year.

## SCRAP AMALGAM DRIVE—PURPOSES

For several years the proceeds of the Dental Auxiliary scrap amalgam drive have been deposited in the North Carolina Dental Auxiliary Fund to be used in worthy projects associated with dentistry in this state. The Fund is administered by the Dental Foundation of North Carolina.

Three excellent projects have been carried out through the resources of the Auxiliary Fund. The first supported employment of a full-time hygienist at the Murdoch Center. The purpose was to demonstrate the improvement in dental health care available to patients through the employment of a hygienist. After one year, the administration of the Center was so enthusiastic about the results a permanent position was established with state funds.

The second project involved a national survey by two dental students at the University of North Carolina. They devised a carefully constructed questionnaire which was circulated to nearly all dental students in the United States inquiring about their attitudes and experiences on a variety of subjects. The data have been analyzed and a report supplied to each participating dental school on the findings at a national level and the data from that particular school for purposes of comparison. An article has been written and published in the Journal of Dental Education. The information has been of considerable value to teachers and dental school administrators.

The third project involved support to retain an expert in preventive dentistry to develop documents describing the North Carolina Dental Society Preventive Dentistry Plan. This plan has been conceived as an all out, state wide effort to reduce the amount of dental disease in our population. All known effective measures are to be used to the extent possible. Funds to implement and operate the plan are to be requested from the 1973 General Assembly. Dr. Frank Law, of Bethesda, Maryland, has been hired to consult with all involved parties, and to write the material which will be required as base information from which legislation can be drawn and the legislative effort mounted. The Auxiliary Fund grant was crucial in financing the efforts of Dr. Law. If efforts to implement the plan succeed, the Auxiliary Fund will have made an extremely important contribution to the people of North Carolina.

The Fund seeks applications for additional projects of worthwhile nature from any group or individual. Inquiries should be addressed to Dental Foundation of North Carolina, School of Dentistry, Chapel Hill, N. C. 27514.

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## **ADA ANNOUNCES WINNERS OF FIRST PREVENTIVE DENTISTRY AWARDS**

Three \$1,000 awards were given at the Association's 113th annual session in San Francisco to Dr. Barrett D. Anderson of San Mateo, California; Dr. Michael G. Buonocore of Eastman Dental Center, Rochester, N. Y.; and Dr. Ernest A. Pearson of Raleigh, North Carolina, in the categories of practice, research and education, respectively. The winners were selected from approximately 150 entries by the ADA Coordinating Committee on Preventive Dentistry.

Dr. Pearson was awarded the preventive dentistry prize for a North Carolina program that promoted community and school fluoridation, brushings, continuing education and similar projects through a statewide cooperative effort by the State Dental Society and the Dental Division of the State Board of Health.

ADA leadership bulletin, Volume II, Number 19, September 18, 1972.

### **JOURNAL INTRODUCES NEW SYMBOL**

The contents page will henceforth display the symbol of the American Association of Dental Editors. The Journal of the North Carolina Dental Society and its Editor are members of this organization.

The Association has over 300 members associated with dental journalism. The AADE conducts an annual educational meeting and publishes a bulletin on dental journalism.

We take pride in displaying the symbol, and we support the principles of the American Association of Dental Editors.

## **VACCINE AGAINST DENTAL CARIES**

On Thursday, November 16, a press conference was held in New York by Dr. Geoffrey Smith of England to announce his findings on a vaccine to prevent dental caries. The story was first reported in the November 11 issue of *Business Week*.

American Dental Association officials have met with Dr. Geoffrey Smith, at his request, to discuss the vaccine which he says can reduce dental decay by 80 per cent to 90 per cent\*. Dr. Smith declined to reveal any details concerning his studies because, he said, of patent rights. Since there is nothing in the scientific literature about Dr. Smith's work, and since he has not offered reports on it at any scientific meeting of which the Association is aware, ADA officials could not evaluate any of his claims and therefore can only be highly skeptical.

Numerous scientists in the United States and abroad have worked on the principle of a vaccine against dental decay. The concept is a good one and if it could be brought to reality, it would be a boon to preventive dentistry. However, none of the investigators who are currently reporting their findings in animal studies have found a vaccine which would merit testing in human subjects. Animal tests have been inconclusive as far as efficacy is concerned and it is most unlikely that the Food and Drug Administration would permit human tests based on current scientific knowledge.

It is extraordinarily premature to publicize a "vaccine" which has not been widely tested and which has not been submitted to the judgment of the scientific community.

\* in children

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# EDITOR'S JOURNAL QUESTIONNAIRE

Dear Reader:

I am complimented that the Executive Committee of the North Carolina Dental Society has chosen to appoint me as your Editor. I accepted the appointment with the thought in mind that you, the reader, would help me.

We are interested in providing a Journal that will interest the reader. Your comments will be of help. Please mail this questionnaire. You may sign it, or omit your signature.

1. Do you like the present format? What suggested changes would you make?

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2. How would you alter the content?

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3. Please rank numerically, in order of interest, the following:

- ..... Scientific articles
  - ..... Feature stories
  - ..... Human interest stories
  - ..... A guest editorial
  - ..... A.D.A. news
  - ..... News of continuing education courses to be held
  - ..... Calendar of future meetings of local, state, national and specialty organizations
  - ..... Book reviews
  - ..... Letter from the students
  - ..... Activities of the Research Center, UNC
  - ..... Additional Suggestions .....
- 
- 
- 

Cross through any of the above that you would omit.

4. Do you read the Journal? If not, why not?

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Thank you for your interest in our Journal.

Sincerely,

R. J. SHANKLE, D.D.S.  
*Editor-Publisher*



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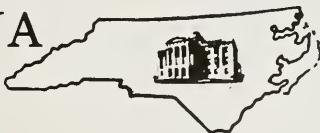
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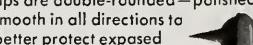
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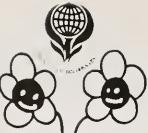
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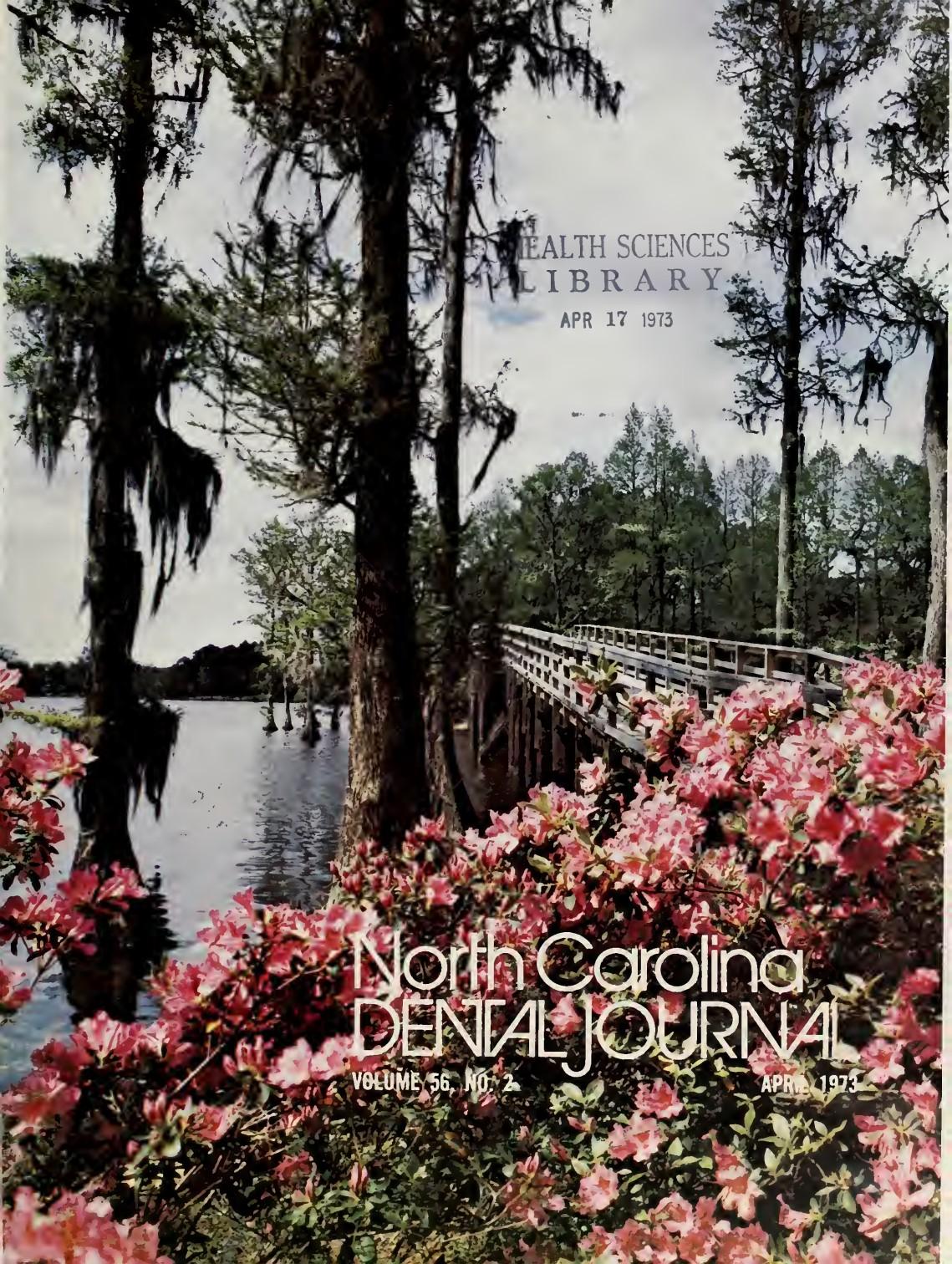
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**ABOUT THE COVER**

Greenfield Gardens, at Wilmington, North Carolina, has been named among the most beautiful municipal parks in the nation. A beautiful walk winds around the shores of the lake through beauty that defies description. Stately moss-draped cypress trees, azaleas, wisteria, dogwood, camellias, mountain laurel, red bud, flowering cherry and daffodils add color. North Carolina is truly *Variety Vacationland*. Picture courtesy of North Carolina Division of Travel and Promotion and photographer Joe Page.

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# North Carolina DENTAL JOURNAL

VOLUME 56, NO. 2

APRIL 1973

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Expressions of opinion and statements of supposed fact are the author's and should not be regarded as views of the North Carolina Dental Society.

# EDITORIAL

## The Road Not Taken

Two roads diverged in a yellow wood  
And sorry I could not travel both  
And be one traveler, long I stood  
And looked down one as far as I could  
To where it bent in the undergrowth;

Then took the other, just as fair,  
And having perhaps the better claim,  
Because it was grassy and wanted wear;  
Though as for that the passing there  
Had worn them really about the same.

And both that morning equally lay  
In leaves no step had trodden black  
Oh, I kept the first for another day!  
Yet knowing how way leads on to way,  
I doubted if I should ever come back.

I shall be telling this with a sigh  
Somewhere ages and ages hence:  
Two roads diverged in a wood, and I—  
I took the one less traveled by,  
And that has made all the difference.

—ROBERT FROST

My good friend down Charlotte way, Tom Nisbet, sent me a copy of the above poem by Robert Frost. This was in response to *The Calf Path* published in the January issue of the JOURNAL. I found it necessary to read it a number of times to get Mr. Frost's meaning. Then I appreciated it more.

Deciding which of the divergent roads to take is not uncommon to any of us in our daily personal lives, in our professional practice nor, as a profession at large. The dental profession of North Carolina ranks very high in the concept, philosophy, and development of Preventive Dentistry. This road was taken long ago by our House of Delegates and recently by the Executive Committee in accepting the *Law Report*. Implementation of Dr. Law's recommendations may be a reality in a short period of time if this is funded by the State Legislature. Some among the herd traveling this road are unhappy, we are told, because such a program would deprive them of dental diseases for which to treat. Such inconsiderate and irrational thinking should be and will be unnoticed by a profession as noble as ours. So these individuals will be dragged along, kicking and screaming, by the tide of dentists forging ahead for better dentistry in North Carolina.

Third party payment has been a controversial issue upon which the profession of dentistry in North Carolina has debated pathway taking. Many who oppose it may think differently now, that we as a profession are among few professionals in America that are discriminated against by the Federal Government in having our fees frozen as all other prices escalate. The "handwriting is on the wall"—this is one of the more recent major steps by the Federal Government to socialize dentistry. The road ahead presents another fork and we must make another decision. The pathway taken may be less tortuous if we become politically active as a profession at large.

We are now hassling among ourselves as to whether



we should follow a roadway that would allow auxiliary personnel to perform some of the rote procedures in the practice of dentistry. Unless we provide means to control the swollen stream of dental needs that are being recognized and may become in demand, we may find someone else, other than the profession, using flood control methods or building a bridge across the stream.

It was of interest to note in "Bulletins and Highlights" of the December issue of the Journal of the American Dental Association, paragraph two, an announcement of Dr. Ingle's resignation and the controversy over his School Dental Therapist Program. However, the next paragraph announced a four member team composed of a Dental School Dean, a Trustee of the American Dental Association, and two others headed for New Zealand to study that country's health delivery system.

Dr. Ingle resigned to accept the post as Senior Staff Officer of the Institute of Medicine in Washington, D. C. The Institute was established for the purpose of conducting research on major national health problems. Dr. Ingle had to take a choice at a road junction and we may meet him at the river where he may be directing the flood control plan. I believe he will attempt not to have congestion as he possesses a well-organized mind. Fortunate are we to have a dentist in that position and he will listen if you wish to be heard.

Dental Education today as well, is at a crossroads as pointed out by our guest editorialist, Dr. William E. Brown, Dean, College of Dentistry, University of Oklahoma.

I am confident that the dentists of North Carolina will follow the pathway for better dentistry for North Carolina and for all people everywhere and, will set an example of leadership. Should not the eldest lead? Therefore, the oldest state dental society in the nation fears not for decision making when it is in the best interest of our people.—RJS.

# GUEST EDITORIAL



WILLIAM E. BROWN, D.D.S.\*

## Dental Education in Jeopardy

Dental education is facing issues that will test to the ultimate the management capabilities, the intellectual abilities, the imagination, and the cool of administrators and faculties. The federal administration says that it will not support dental education with dollars to the extent that it has in the past. State governments are asking for more efficient management systems and greater accountability for the use of resources and the quality of the graduate. Dental organizations are questioning more than ever before the need for more dental manpower. The public is asking for greater participation in the educational system.

Confrontation between dental schools and their various publics is commonplace and problem identification is far ahead of problem solving. Admittedly, one must know the problem before he can develop solutions, but the time has come for all concerned to join the issues and help find answers instead of contributing further to the problems.

The cut-back in federal funding will produce serious problems for every school, and in some instances the effects will be devastating. Alternate sources of support will have to be secured, and it is obvious that state tax dollars will have to be the major source. State legislators can't be expected to understand the needs unless they are told, and university administrators can't do the job alone. The dentists of each state need to get into the act

and become part of the task force to educate the decision makers.

Dental educational programs have improved more in the past 10 years than during any other period. Yet, these advances are probably not well-understood. The schools must do a more effective job of informing their publics about programs, the products of their programs, and the institutional needs. Above all, it's time to close ranks and get the job done.

Too often do I hear teachers refer to "those" practitioners and practitioners refer to "those" teachers instead of "our" practitioners or "our" teachers. The profession cannot really succeed in its mission if it consists of isolated components pulling in different directions. There will always be differences between educators and practitioners. These differences can be healthy and result in progress or they can be destructive and result in regression and chaos. There must not, however, be a difference in the major goal — *better health for America*.

We appear to live in a world of conflict which few of us have known before—parents against children, children against parents, people against government, and dental associations and practitioners against educators and vice versa. I suspect the turmoil will get worse before it gets better, but a lot of people had better start thinking about how we can glue the pieces together and reassemble the team.

636 N. E. 14th Street  
Oklahoma City, Oklahoma

\*Dean, College of Dentistry, University of Oklahoma.

# LETTERS to the Editor



**EDITORS NOTE:** Two recommendations arose from the Michigan Dental Association's October 11 Conference on Scientific Program: (1) That the Michigan Dental Association and its components adopt a policy limiting the fee or honorarium for a dental speaker to a maximum of \$100 per day plus expenses, and (2) that the Michigan Dental Association Board of Trustees consider introducing a resolution to the American Dental Association's House of Delegates amending the American Dental Association Principles of Ethics to make it unethical for a dentist to charge excessive fees for sharing professional knowledge.

Dr. Baker forwarded a copy of his letter to the President of the Michigan Dental Association to your Editor. It should be of interest to all.

**MEMO TO:** President Michigan Dental Association  
**FROM:** Benjamin R. Baker, D.S.S., Former Editor, NORTH CAROLINA DENTAL JOURNAL

Dear Sir:

I have just read with some considerable interest the ADA Leadership Bulletin in which a Michigan Dental Association conference on scientific programs has been condensed. In this particular bulletin the recommendations discussed the limitations of fees or honorariums for a dental speaker to a maximum of \$100 per day plus expenses. I have read the rationale for this recommendation and I have read the supportive statements from other professional groups relative to this statement. I feel urgently called upon to protest this decision for the following reasons. You have a very logical and legitimate complaint against professional touring dental speakers who gouge the profession with information which they sell. A legitimate complaint can be lodged against those people who have a product to sell or those people who are primarily entertainers and give very little information that is useful in a dental office. These should be regulated to some degree. However, the private practitioner or educator who gives of his time to present a scientific program to dentists should not be included in this group. It should be obvious to this committee and to your dental association that a dental office overhead far exceeds the overhead of any medical office and/or other professional type office. Whether the dentist is working in his office or not, his overhead continues. To delete from that man's potential income by requesting him, in his productive time, to present programs to other people without adequate compensation is incredible to me. The time spent in preparation by a good clinician amounts to approximately 10-15 hours for each hour of performance. These are untold hours of preparation and expense in developing materials and slides for which the man is never compensated. The only compensation that this individual can have is an adequate fee for his services. If he has something to share with others which is worthy,

dentists should not be unwilling to pay for this type of service.

We are approaching a time in dentistry now where national health service is imminently upon us, where dental licensure or relicensure is dependent upon proof of quality continuing education. It behooves every practitioner who is worth his salt to become acquainted with and be a part of organized dentistry to the best of his capabilities. We should all have a voice in dental politics and what goes on in health affairs in this country. The proposal that you are making can indirectly and directly affect this adversely. Any clinician who is worthy of giving a competent program is not going to accept a small honorarium when he could stay in his office and do four to five times that from a production income standpoint. I cannot believe that the dental association in Michigan is serious about asking speakers to accept one fourth to one fifth of their daily office net production to go and give programs on a regular basis at the \$100 honorarium level. We have much to offer in this country from the standpoint of sharing information with each other. We have historically had no hesitation and no problem in paying adequate fees for adequate service. If this resolution is passed by your dental association, you will find a dearth of material and people available to you and your state. If you carry it to the American Dental Association as a resolution and if it is passed there, the diminution of available speakers of quality will be significant. I urge you to reconsider this decision which you have made because I think it is not in the best interest of dentistry and it is harmful to you directly and potentially harmful to dentistry in general.

Please understand me, I do not support professionally touring dental speakers. I do not support the dentists who use the tour for their income. I do not support the people who publish manuals and who publish a service when they in fact make a commercial endeavor out of speaking engagements. I do not support private practitioners who charge a fee which is far in excess of their capability of production in a dental office. I believe, however, that if a man is worthy of being asked to speak, that he is worthy of being paid a fee commensurate with his daily production. I believe that this is a fairer estimate of what that man is worth than to set an arbitrary minimum fee. As far as the bar associations, or medical professions or any other professional group is concerned, these people do not have the overhead problems that we have in dentistry and therefore they cannot speak with expertise in this area.

Please allow me to express my disagreement with the thesis of your resolution. The right to different opinion is a sacred one to me. I do not wish to offend you or your fine association. However, I feel that my views are more in keeping with the best interests of dentistry.

2101 North Heritage Street  
Kinston, North Carolina 28501

BRB:pw

# PRESIDENT'S REPORT

JOSEPH M. JOHNSON, D.D.S.

I would like to preface my remarks this month with a question for each of you to consider before reading further: "Where will the profession of dentistry be in ten years? What changes will have occurred in our roles as dentists during the seventies?"

Actually the two part question above is not just a philosophical query but one which has pragmatic implications for the dentists in our state. Most of us agree that our profession is faced with many decisions and increasing demands. We must realize that this makes it imperative for us to be informed, active, and influential in helping to guide the direction which dentistry is taking rather than sitting back in apathy and indifference as change comes about.

Sometimes we need to speak out forcefully in favor of new developments and programs if we believe in them and want them to get off the pad. If we remain in silent agreement, a few dissenting voices may have a stronger impact than is justified. Frequently, the Executive Committee of the North Carolina Dental Society *needs your positive vocal endorsement* rather than tacit consensus. Such endorsement, when you can give it sincerely, helps to generate action which is more effective, and more representative of your needs and interest. Such programs as that of the North Carolina Delta Dental Plan merits your confidence and overt support as it moves forward in its undertakings.

Dentists possess more political clout than they sometimes use. It behooves us to develop this capacity in striving for

better oral health for the citizens of North Carolina.

At the time of this writing the Committee on Preventive Dentistry is pushing for a well documented and planned program for prevention to be passed by our state legislature. I hope that each of you have, and will continue to give, this program your enthusiastic support, and that you have contacted your local representatives to the General Assembly.

Our North Carolina ADPAC group under the able leadership of Harold Maxwell is off to a good start. The effectiveness of this program will be demonstrated more fully in state and local elections in the years ahead.

We are moving rapidly into an era of third-party dentistry. This undoubtedly will call for a greater demand for dental services. It will also bring additional "paper" work and necessitate effort to be spent in following "guidelines." We, as dentists, will be challenged to see that more people in this state have high quality dental care. A group from your Executive Committee had a recent conference with David Flaherty, the new Secretary of the North Carolina Department of Human Resources. We hope that from this conference will arise a strong push for a meaningful Title XIX Program in the state of North Carolina.

The Committee on Dental Care has been looking into the dental program in some of the public institutions in this state to determine what kind of dental care these people are receiving. Zeno Edwards and his committee have been visiting our mental hospitals, special schools, penal institutions, and other facilities to take a close look at the dental programs. Many of our public officials have expressed appreciation for this concern by our dental society. We will be interested in recommendations from this committee.

It seems to me that dentistry in the seventies needs to emphasize both quality and flexibility. In Continuing Education we can learn better ways of treating patients, becoming knowledgeable in our field. We must seek ways for better utilization of our ancillary personnel. We must be willing to experiment, and innovate under carefully controlled conditions, in order to meet increased quantitative demands, with more qualitative productivity.

I cannot predict where dentistry will be in ten years. However, I feel strongly that we as dentists must communicate openly about the various issues and alternatives which our profession faces. We must take positive steps to work together for high standards of excellence in an ever changing society.



San Francisco, November 2, 1972

Seated L to R: Bob Litton, Betty Johnson, Joe Johnson, Erbie Medlin.  
Standing L to R: Nancy Spillman, Harry Spillman, Ralph Coffey, Cecile Coffey, Isabell Harrell, and James Harrell.

426 King Street  
Laurinburg, North Carolina

# Editorial

R. HOGAN GASKINS, JR., D.D.S.\*

The practice of dentistry in the state of North Carolina is hereby declared to affect the public health, safety, and welfare and to be subject to regulations and control in the public interest. It is further declared to be a matter of public interest and concern that the dental profession merit and receive the confidence of the public and that only qualified persons be permitted to practice dentistry in the state of North Carolina. The North Carolina State Board of Dental Examiners is hereby continued as the agency of the state for the regulation of the practice of Dentistry in this state.

The above paragraph is taken from the Dental Laws of North Carolina.

We in North Carolina are fortunate to have a dental practice act that has evolved into its present form. This was accomplished by many hours of thought and consideration by many that preceded us in dentistry.

My reason for stating the above is that we in dentistry are responsible for the public health, safety, and welfare, when it comes to the practice of dentistry; therefore, we should move with caution when changes in our dental laws are considered.

Let me state unequivocally that the other board members and I are not against change. Change is the vehicle by which dentistry has arrived to its rightful place in the health professions.

Fortunately, dentistry in North Carolina has thought-provoking considerations contributed by the general dentist, the specialist, the educator, the researcher, the hygienist, the dental assistant, and the laboratory technician. Everyone involved with our profession from its beginning has presented proposed changes throughout the years. Dentistry as we practice it today is due not only to the changes that have been adopted but also to the discarding of proposals that would have moved us backward rather than forward.

Now we have before us many topics for consideration:

1. Regional testing;
2. Reciprocity;
3. Continuing education;
4. Expansion of auxiliary functions;
5. Insurance programs.

When any issue is presented to the profession that requires change, one will usually find agreement and opposition. The Board of Dental Examiners has been judged as opposing most proposals because of their inflexibility to trends and changes in dentistry. The Board has as its first consideration the people of North Carolina. It attempts in its deliberation to determine how an issue will effect the public for years to come, how dentistry will be changed, and how will we progress with the change proposed.

Being human, none of us in dentistry is perfect and none of us can foresee the result of our decisions until what has been done is tried and proven to be either beneficial or detrimental. Therefore, the Board moves with caution. I would ask everyone in dentistry to move with caution. Let everyone in the profession be informed so when a decision for change is made, it comes from as many in the dental profession as possible, and let our decisions be made not for

# Continuing Education

ROY L. LINDAHL, D.D.S.\*

EDITORS NOTE: Dr. Lindahl is President of the American Society of Dentistry for Children.

For most of its period of existence, the University of North Carolina School of Dentistry has sponsored continuing education courses in various subject areas. Owing to demands on faculty time in building a new school, developing and modifying an undergraduate curriculum, initiating several graduate curricula, and a solid research program, the continuing education activities have been limited. A new era for continuing education is upon us and the School of Dentistry now is preparing to expand its programming.

There is an increasing demand for continuing education activities by the practicing profession and several states require it for continuing licensure. The School of Dentistry sees its role in continuing education to be designed to aid in meeting the needs of the profession in the state and region. Its efforts should be coordinated with continuing education activities conducted by other agencies and groups.

In recognition of this role, the School conducted a survey of all North Carolina practitioners to identify a profile of practitioners and their continuing education interests. The greatest interests expressed were in the area of diagnosis, preventive dentistry, restorative dentistry and fixed and removable prosthodontics. Other areas receiving considerable attention were Oral Surgery, practice management and utilization of auxiliary personnel.

Currently we plan to develop a series of courses to be announced in May to be offered through December 31, 1973. During the fall of each year a complete listing of courses to be offered in the next calendar year (January-December) will be circulated to permit practitioners to plan their continuing education activities in advance. Each course will still have individual announcements.

We recognize we cannot meet the total need for the state. We desire to serve in a cooperative way with the profession, other institutions and agencies to the maximum benefit of the profession and the people it serves. We look forward to being of continuing service. Your constructive comments are always welcome.

\* Professor of Pedodontics and Director of Continuing Education, University of North Carolina School of Dentistry.

today only, but for those that follow. We must consolidate our efforts for dentistry.

I hope that communication between all elements of our great profession will continue to improve and some method of being informed, so the right decisions will prevail, can be initiated. I would recommend an informative newsletter from the Dental Forum Committee to be sent when necessary to the profession.

These comments are mine and I hope they will be taken as a constructive way of explanation for actions and Board decisions.

200 Preston Road, Jacksonville, N. C. 28540

\* President, North Carolina State Board of Dental Examiners

# Items of Interest

## REPORT ON THE ANNUAL MEETING OF THE SOUTHERN CONFERENCE OF DENTAL DEANS AND EXAMINERS

Activities of the Southern Conference of Dental Deans and Examiners conducted at its annual meeting in Augusta, Georgia, on January 6 and 7, 1973 are of interest to the dental profession in North Carolina.

Five years ago the Conference began study of the regional testing concept relative to the process of licensing examination. The initial discussion, held in Chapel Hill in 1968, included a description of the Northeastern Regional Board and its operations by Dr. William Collins, then secretary of the Northeastern Regional Board. In subsequent meetings of the Southern Conference other representatives of the Northeastern Regional Board and various interested parties have made the Conference membership aware of the developments of the regional testing concept throughout the United States.

One year ago at the Southern Conference annual meeting in San Antonio a committee was appointed to draft a model constitution and by-laws to serve as a basis of organization for the Southern Regional Testing Agency. In August the membership heard the report of this committee, reviewed the document developed for consideration, and submitted constructive comments about how the proposed constitution and by-laws could be improved. A summary of these discussions and a copy of the model constitution and by-laws are to be sent to all state boards represented in the Southern Conference of Dental Deans and Examiners as soon as the material is available.

It was agreed that the various state boards would convene a meeting to consider refinement of the constitution and by-laws, and further consider the establishment of the testing agency. It is apparent that several states in the southeastern region will proceed immediately in setting up such an agency, others wish to give additional study to the matter and at least two states do not intend to participate at the present time. It is anticipated that the states most interested will move to establish the Southern Regional Testing Agency in the near future since implementation would only require the cooperation of two or three states. Other states could then participate if and when they so desired.

In view of the findings of the American Dental Association survey on licensures to the effect that the regional testing concept is very popular with practitioners in the southeast region, all North Carolina practitioners will have an interest in these proceedings. Members of the North Carolina State Board of Dental Examiners have indicated their interest in exploring the possibility of regional testing but have made no general agency commitment about their possible participation.

Editors  
Esquire  
488 Madison Avenue  
New York, New York 10022

January 29, 1973

Dear Sirs:

This is in comment on the article "Can you afford to have teeth" carried in your February issue. The article makes a number of good and valid points, but much of it is highly misleading because of misinterpretation of facts and the omission of others.

1. The expense of dentistry: dental costs in the past decade have risen, true; but they have risen more slowly than medical costs in general and *more slowly than wages*.

2. There is no real peer review in dentistry, according to the article, but there is in medicine. Nonsense. Dentists who operate in hospitals are subject to the same peer review as their medical colleagues. As for office care, who reviews the decisions of the physician in his office? Who checks his diagnoses, his prescriptions? Peer review is coming into being in the dental profession and California, which has the largest dental insurance program, has a very effective peer review system.

3. The article praises the Magnusen bill which proposes a national dental care program for children. What it fails to mention is that the bill was designed and introduced specifically at the request of the American Dental Association. The Association has been fighting to have priority programs for children developed since the 1930's.

It is unfortunate that the writer spoke to so many sources but failed to tap the one which speaks for more than 100,000 dentists, the American Dental Association.

Sincerely,  
PETER C. GOULDING  
Director of Communications

PCG:tp  
From ADA Leadership Bulletin

## BOEING COMPANY SELECTS DELTA DENTAL PLAN SYSTEM AS CARRIER FOR NEW MULTISTATE DENTAL BENEFIT PROGRAM

The Boeing Company, Inc., Seattle, Washington, one of the nation's leading aircraft and aerospace corporations, has selected the Delta Dental Plan system to underwrite and administer a prepaid dental benefit program for approximately 25,000 hourly employees and their dependents at plant locations throughout the United States.

DDPA Newsletter, Vol. 8, No. 4

# MERCURY

Carey T. Wells, Jr., D.D.S.

WHEN Lewis Carroll was selecting his characters for *Alice's Adventures in Wonderland*, it wasn't by chance that the Mad Hatter was a hatter. In the nineteenth century, workers in the felt hat industry used mercury extensively in the processing of felt. Before the necessity for proper safety precautions was recognized, mercury poisoning gave the expression "Mad as a Hatter" to the language. The workers absorbed mercury by direct contact and by inhalation of the high concentration of mercury vapor in the atmosphere of the factories. The results were some of the classic symptoms of severe mercury toxicosis, among these, tremors, mental disability, and loss of coordination. According to John Patman, in a recent National Geographic article, "In the United States the hatters' disease was known as the Danbury Shakes after the Connecticut Hatmaking City."

Cinnabar or Mercuric sulfide, the ore from which mercury comes, has been mined since man's early history and mercury was found in Egyptian tombs of 1500 B.C. Its uses have been many and varied throughout history and with our current technical explosion, mercury and its compounds are finding new uses almost daily.

Several years ago, canned Tuna was taken from grocery shelves because of mercury contamination and sword fish virtually disappeared from the market for the same reason. The general public was promptly made aware of the more sinister side of this ubiquitous servant of man. In the public press, with a growing awareness of the importance of the preservation of our environment, we see stories of pollution by compounds of mercury almost weekly.

With this background, we dentists are inclined to take another look at our old friend and constant companion in the dental office, and it is well that we should.

Last winter, one of our colleagues, in



the First District, went to his ophthalmologist for a routine checkup. During the examination some unusual pigmentation was noted on the lenses of his eyes. Another ophthalmologist was consulted and it was decided that the pigmentation was probably not significant but that it should be seen again in six months. When the dentist returned after the allotted time, it was found that he not only had the pigmentation on the lenses but that now it was also present on the retina as well. Mercury toxicosis was suspected. A pathologist was immediately consulted and a twenty-four hour collection of urine was taken by the dentist. When the laboratory report was returned the results indicated that our colleague had two and a half times the maximum acceptable level of mercury in the body.

The discovery was made in July, 1972 and the dentist was put on medication designed to combine with the mercury in the system and to facilitate its gradual elimination from the body. This regimen was conducted by an internist who monitored the patient carefully to prevent adverse effects on the leucocyte count. In January 1973, he was informed that his mercury level had returned to normal and the pigmentation within his eyes has diminished. He has had a fairly high turn-

over among his personnel recently so no danger was thought to affect them. Soon after the discovery was made, several other dentists were consulted about the potential hazard. In the discussion that followed, it was decided that Taylor Instrument Company of Arden should be consulted. It was known that mercury is used by Taylor in the manufacture of their thermometers, barometers and other products and that they employ a industrial hygienist on their staff. One of his principal duties is to protect the employees from mercury poisoning. Mr. L. C. Ducker of Taylor Instrument Company tested some fifteen Asheville area dental offices for atmospheric mercury levels. When the testing was completed, it was found that four of the offices tested had as high an atmospheric mercury level as that of the first dentist. When urine tests were conducted on the four dentists from these offices none were found to have excessively high mercury levels. All of the offices with the high mercury readings, including that of the first dentist, had carpeted treatment rooms. The presence of higher than acceptable safe levels of mercury in the air of a significant sample of the offices tested does indicate that there is a problem which should not be ignored. A mercury testing program to all those members of the Buncombe County Dental Society is available.

## SUMMARY

1. Ultrasonic condensing instruments should not be used for placing amalgam restorations. They release millions of small particles of mercury which are readily vaporized into the office atmosphere.

2. Kneading of the amalgam mix in the hand should be avoided and as dry a mix as possible should be used.

3. Mercury should be stored in unbreakable tightly sealed containers.

(Continued on page 33)



# first district news

Carey T. Wells, Jr., D.D.S., Editor

**DR. WALTER CLARK RETIRES.** An outstanding career came to a close when Dr. Walter Clark retired in January. Dr. Clark has been a leader in all phases of organized dentistry and for a number of years served on the State Board of Dental Examiners. He has been in practice for over fifty years and an inspiration to many of us who have known him.

Western Carolina University sponsored a program in co-operation with the Pedodontics Department of the University of North Carolina School of Dentistry on December 16, 1972. Dr. Eugene Howden from Chapel Hill presented a half day seminar on "Current Topics in Pedodontics." The program was practical and covered the more recent developments in dentistry for children including Enamel Etching technique, the status of pit and fissure occlusal sealants, and the effects and treatment pertaining to nursing bottle caries. The attendance included dentists and auxiliaries. An expression was made for more programs of this nature in the future.



Drs. Eugene Howden and James Dimsdale

The largest and one of the most active dental groups within the First District is the *Buncombe County Dental Society*, which had its annual Buffet and Dance at the Biltmore Forest Town Hall on the evening of December 7th.

New officers installed for 1973 are Gary Daniel, President; Jerry Parsons, Vice-President; Bob Garren, President-Elect; and Robert Owen, Jr., Secretary-Treasurer.



Drs. William Mynatt, William Pennell, and Kenneth Ray



Dr. Arthur Riddle and Dr. Stanley Holt

**FIRST DISTRICT PLANS FALL MEETING.** The annual meeting of the First District Dental Society will be held on Friday, Saturday, and Sunday, September 28, 29 and 30, 1973. Again the meeting will be at the Green Park Hotel in Blowing Rock. Joe Roberson's committee is planning a program on Prevention. Complete plans will be announced in the next issue of the JOURNAL.



# second district news

James D. Blankenbeckler, D.D.S., Editor

The Second District has been busily working since their fall district meeting. Plans were co-ordinated and put into effect for Children's Dental Health Week. The television stations and radio stations worked in helping to get across the message of Children's Dental Health. Visits to the schools and appearances before other groups helped demonstrate to children the benefits of removing dental plaque.

In the counties of Alleghany and Wilkes, a "Preventive Dentistry" program is being conducted with the fifth grade children. This demonstration and study is for one year and is being financed through the Regional Health Commission of Easter Appalachia. This program probably will be continued for another year.

Sad news came to the Second District when it was learned that Bob Watson of Charlotte suffered a heart attack while at a State Board of Dental Examiners meeting in Chapel Hill. We understand that he is doing well and is recovering at Presbyterian Hospital in Charlotte.

Winston-Salem dentist, Wayne Irvin, will practice dentistry in Europe. We understand he is moving to Switzerland.

Members of the Second and Third Districts attended A Seminar for the Management of Dental Patients with Cardiovascular Disease sponsored by the Forsyth County Heart Association. Attendance was great with 66 persons present. Presentations were made by Dr. Henry Miller, Dr. Jack Kaufman, Dr. Al Rusty, Dr. Bill Spencer, and Dr. Harry Spillman of Winston-Salem.

The Blue Ridge Dental Society will present its program May 26, 1973 at High Meadows Lodge near Roaring Gap. The featured speaker this year will be Dr. H. V. Murray of Chapel Hill. Dr. Murray will be speaking on Crown and Bridge Reconstruction. This meeting will be open to all dentists in the State.

The Academician Dental Study Club of Winston-Salem and Greensboro met with Dr. Ken Fordham to attend a conference on Nitrous Oxide Analgesia. Lectures were presented to the dentists and their personnel, and demonstrations were given at Dr. Lad Landau's office in Guilford College.



Dr. Keith L. Bentley, North Wilkesboro, North Carolina, President, Second District Dental Society

**Quick preview of the fall district meeting:** The principal speaker will be Dr. Paul Jacobi. The meeting will be September 10-13 at the Downtowner East in Charlotte. Emphasis will be placed on local dentist participation. This meeting will be different as it will begin on Saturday rather than on Sunday as before. As usual, there will be table clinics, projected clinics, and fun and games for all.



# third district news

NO NEWS!



# fourth district news

NO NEWS!

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# fifth district news

Wayne C. Anderson, D.D.S., Editor

Amid a blanket of snow, President Bill Kidd has been very busy designing some very informative programs for Fifth District members.

A Study Club Organizational Meeting was held on March 7 at the Ramada Inn in New Bern. There were representatives present from each study club in the district, as well as all district officers. The purpose of this meeting was to explain the different methods of organizing study clubs, and to encourage those who are interested in the formation of study clubs in the Fifth District. Dr. Wade Ward, Chairman of this District Committee, sent invitations to all Fifth District members, with the emphasis on continuing education. President Bill Kidd feels that such a meeting was most valuable to those dentists who are not presently involved in active study clubs.

President Bill Kidd hosted a luncheon meeting for the Executive Committee and all new district members on March 11. District officers were charged with the responsibility of bringing the new members to the meeting. The purpose of this was to acquaint our newest members with the organization and opportunities to contribute to organized dentistry on the district level.

The FIFTH DISTRICT DENTAL SOCIETY will be the first of the districts to hold its fall meeting. The Timme Plaza in Wilmington will be the site of the meeting September 12-14. Dr. William Gilmore, Professor of Operative Dentistry at the University of Indiana will be the principal speaker.

The Fifth District welcomes you to a weekend of education, sun and fun down East. More details of our program will follow in the next issue of our JOURNAL.



Dr. William E. Kidd, Washington, N. C.  
President, Fifth District Dental Society

# The Preventive Movement Is Strong

**George G. Dudney, D.D.S., M.P.H.**

**T**HAT North Carolina dentistry has received a national honor for its efforts to promote preventive dentistry throughout the State is only one indicator that prevention is rapidly achieving a foothold here.

On October 29, 1972 at the American Dental Association's convention in San Francisco, ADA President Carl A. Laughlin presented a plaque and a check for one thousand dollars to the North Carolina Preventive Dental Health Program. Dr. E. A. Pearson, Jr. received the gifts "on behalf of many who have helped to forge the comprehensive dental program in our State." The ceremony was held at a special meeting of the House of Delegates.

Dr. Pearson, director of the Dental Health Division, State Board of Health, Department of Human Resources, declared in brief acceptance remarks that the North Carolina preventive program is a cooperative endeavor of the Dental Society and its Preventive Dentistry Committee, the University of North Carolina School of Dentistry, community colleges training dental auxiliaries, and the Dental Health Division.

The financial award is to be used for items needed in the preventive program.

To recognize the national honor, a plaque describing it and the principal participants who made it possible will be placed in the headquarters of the North Carolina Dental Society.

The award, made by the American Dental Association's Coordinating Committee on Preventive Dentistry, was one of three major awards given. The three categories were: Practice and the Patient; Research; and Education. North Carolina took the Education honors. The ADA awards were made possible by a grant from Johnson and Johnson Company; 1972 was the first year of the program.

## A Little History:

North Carolina's preventive program had its inception in 1970 when the House of Delegates of the Dental Society passed eight resolutions advo-

cating a statewide preventive program. Outgoing President Claiborne Pindexter lent strong support.

Dr. William Hand, the Society's 1970-71 president, established the Task Force for Community Preventive Dental Health programs as an ad hoc committee. (This committee was given standing status and had its name changed to Preventive Dentistry Committee in 1972.) The committee was charged with planning continuing education courses for dentists, developing a plaque control kit and developing educational materials.

On April 3, 1971 the Preventive Dentistry Committee held at Chapel Hill a seminar for known preventive minded dentists. They established criteria for continuing education workshops, discussed needed materials and volunteered their services for the statewide program.

During the balance of 1971, a nu-

cleus faculty made up of private practitioners began to experiment with plaque control workshops for dental public health personnel, dental assistants, agricultural extension leaders and the North Carolina Citizens' Committee for Dental Health. At the same time preventive materials and a kit were being developed by the Dental Health Division staff working with Preventive Dentistry Committee members.

From January through March, 1972, the Preventive Dentistry Committee conducted five regional workshops on prevention for dentists and dental auxiliaries. Costs were underwritten by a modest registration fee. There were 113 dentists, 180 dental assistants and 64 dental hygienists trained in plaque control techniques and in methods of incorporating disease control into the private practice. A survey made two months later revealed that 78 per cent of those re-



Dr. Fred H. Miller, New Bern, one of the leaders of the preventive dental movement in North Carolina, shown demonstrating the new plaque control techniques at a preventive dentistry workshop for dental professionals.

\* Assistant Director, Dental Health Division, State Board of Health, Department of Human Resources.

## DUDNEY—PREVENTIVE

sponding indicated that they were already initiating disease control programs in their offices.

The 1972-73 Preventive Dentistry Committee held a sixth workshop for dentists and auxiliaries on February 3, 1973 at Fayetteville to include those professionals unable to take the training in 1972.

1972 witnessed movement to train non-dental health professionals and teachers in plaque control methods. Preventive Dentistry Committee members joined Dental Health Division staff in training agricultural extension home economics agents and club health leaders in regional workshops. These leaders, in turn, organized plaque control workshops at the county level. The Division assumed consultant responsibility for a team of preventive education workers who are serving in seven East Appalachia counties; these educators are conducting teachers' workshops and teaching preventive dental techniques in all fifth grades of the area. The Division also started comprehensive teacher-training prevention workshops, on a pilot demonstration basis, in selected counties of the state. All these activities are ongoing.

Concurrent with the training workshops has been the development in the Dental Health Division of more new preventive materials for use in schools and lay training programs.

Early in 1972 a group of Eastern North Carolina dentists conducted a six-weeks' television-radio-newspaper-telephone preventive educational campaign throughout a 2,000 square mile area. The "Dr. Dial" program elicited favorable response from over 55,000 citizens.

Also in 1972 a North Carolina chapter of the American Society for Preventive Dentistry was activated with M. W. Aldridge of Greenville as the first president; other officers include George Mayo, vice-president, Carle W. Mason Jr., secretary and Fred Lopp, treasurer. The chapter now has over a hundred members and is soliciting others. Projects of the chapter include bringing such outstanding national preventive leaders to the state as Omer Reed of Phoenix, Arizona, who conducted an ASPD workshop at the recent Guilford-Forsyth clinical sessions in Greensboro. The chapter is also engaged in encouraging pharmacists

to stock preventive dental supplies and to place them prominently in their stores; it plans preventive exhibits for dental meetings.

### Parallel Prevention Activity:

In North Carolina the prevention package means more than instruction in disease control methods. It also includes community and school water fluoridation plus various methods of administering fluorides to schoolchildren who have no other access to the benefits of fluorides.

The Dental Health Division, reflecting the policies of the State Board of Health, has prosecuted a strong fluoridation program for communities. North Carolina has never sought a mandatory fluoridation law, believing that it is a sounder procedure for each community to confront the issue and to educate its leaders and its other citizens on the merits of fluoridation. The Division provides consultation to communities for evaluation of readiness to adopt fluoridation and for organizational preparation to go for it.

The State now has the most extensive rural school water fluoridation system in the Nation. With 37 school fluoridators operative now, the network is expanding. The program provides the benefits of fluoridation to schoolchildren who do not drink water from fluoridated community supplies. (Research indicates that by drinking fluoridated water at school approximately a 40 per cent reduction in dental caries can be achieved.)

Schools not now in fluoridated areas, or in which, for one reason or another, fluorides are not added to school water supplies, may be participating in fluoride tablet, brush-in, or fluoride mouthwash programs. The aim is to reach every possible child with fluoride protection.

Oral cancer screening, now standard in some private offices and conducted from time to time in community clinics by private practitioners, is an important preventive activity in the state.

### Support for Prevention:

The extensive activities carried out for prevention, especially during the past two years, have been done on a shoe-string. Today, the pressures from all directions for strengthening and expanding the preventive programs are great. In terms of the backlog of dental need and dental neglect, plus the

high cost of dental care, logic dictates that the prevention efforts should go forward with all the support that can be summoned.

In the Fall of 1972 the Dental Society employed, under contract, Dr. Frank E. Law, a dental public health consultant from Bethesda, Maryland, to assess the needs and resources for expanded preventive action in the State. The Law Report has been approved by the Dental Forum and the Society's Executive Committee. The expectation is that proposed legislation will be drafted and that the General Assembly will be asked to approve a 10-year prevention plan for dental health, with adequate appropriations to sustain it. The request would call for increased manpower for the Dental Health Division to handle preventive dental education in schools and communities and to assist with school and community water fluoridation; it would also provide needed funds for the development of tools and materials.

North Carolina is in a leading position in the Nation in preventive dental health. It has achieved that position through dedication, hard work, and with little financial help. Now that the citizens of the State have become alerted to the advantages of prevention and are demanding more in the way of preventive services, all the dental professions are encouraged to support whatever movements develop to help provide the resources to perform better in reaching more people more effectively.

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# A NORWEGIAN'S DIARY

B. Nygaard-Ostby, D.D.S., Ph.D. (Oslo)

NEGOTIATIONS between The People's Republic of China and Canada resulted in a Canadian industrial exhibition held in Peking in August 1972, the largest one this country ever had arranged abroad. All kinds of machinery were shipped from Canada and displayed for 10 days in a huge building, which was visited by 250,000 Chinese from various parts of the country. The exhibition also comprised Canadian tungsten-carbide burs, and the author was invited to participate as a demonstrator of them.

The sojourn, which lasted for three weeks, became the most interesting ever experienced by the author. The study of Chinese dentistry was only a part of a very busy program, but nevertheless, extremely intriguing. In this report, I have chosen to present some excerpts from my diary, in order to impart some of the impressions which the conditions in this vast enigmatic sub-continent made on me as a visiting tourist and as a dentist:

**August 15.** After a pleasant flight from Vancouver with a stop-over in Hong-Kong, the chartered Canadian Pacific Airlines plane landed at the peaceful, magnificent airport outside Peking. A representative from The Chinese Medical Association, Lin Poo-King, M.D. (Peking), D.D.S. (Tokyo), through the Association's interpreter, Mrs. Wang, greeted me as "a friend from Norway" and assured me that everything would be done to make my stay enjoyable.

The hotel, which was the delegation's headquarters bears the name "Friendship House" and is situated in a large park with a tennis court and a swimming pool of Olympic dimensions. A host of young smiling Chinese were at our service, and we were told that tipping is strictly forbidden, here as everywhere in the country. I discovered immediately that many of them were

carrying a small book, in which they were reading when not on duty. When I was relaxing in the lobby, one young boy on the staff was sitting beside me, reading this book. I looked over his shoulder and saw it was a textbook in elementary English. When he discovered my interest, he started to ask my help with his pronunciation problems. In a short while, I had a class of 6-7 teen-agers eagerly listening and trying to pronounce the difficult English words. It was real fun.

**Editor's Note: Dr. Birger Nygaard-Ostby is an internationally known Endodontist, Oral Pathologist, and he is the founder of the Norwegian Institute for Dental Research. He is also a recipient of the highest honor bestowed on a citizen of Norway — THE ORDER OF SAINT OLAF.**

**August 17.** Mrs. Wang picked me up in a taxi this morning and took me to the headquarters of The Chinese Medical Association, where its Leading Member, Mr. Kuo, met me on the front steps and led me to a conference room, where tea, cigarettes and delicate candy were served. Mr. Kuo expressed his pleasure at seeing a Norwegian friend as his guest, as Norway had been one of the first nations to recognize The People's Republic of China diplomatically and to establish an Embassy in Peking. He asked about my preferences and offered to assist in every way. I told him that my main interests were Chinese dentistry and acupuncture, and also that a visit to a People's Commune would be appreciated.

The conversation naturally would be dealing with dental health service, and

although I did not ask directly, I got the impression that the dental practitioners were affiliated with the medical association, and that a dental association as we know it, did not exist. It appeared also that statistics concerning dentistry were lacking as neither a survey of the prevalence of dental diseases, nor exact information about dental personnel, were available. I touched on dental education today, but the answers were inconclusive. One thing became clear: *the stomatological system had been abolished with the Cultural Revolution, which has brought principal changes in many aspects, also in dental education.* There were no dental faculties at the universities, and the teaching of dentistry was conducted at the general hospitals, but the duration of the study and the content of the curriculum had not yet been definitely established. It was stated that it was "under development," and the young "dental practitioner" has probably gone through a short course, mainly comprising the technical aspects. Consequently, there must be two categories of dentists now: 1. stomatologists, graduated before the revolution, and 2. dental therapists educated afterwards. On the whole, my first impression was that dentistry ranks low on the priority list today, with the main concern being to keep up the standards obtained in feeding, clothing and housing more than 750 million people.

**August 18.** Already today Mr. Kuo's promises proved to be more than empty words. Mrs. Wang took me to a "stomatological hospital," where I had the opportunity to see all kinds of dental treatment carried out. The equipment was simple: conventional electric engines, ordinary bulbs in front of the chairs, chip blowers and water syringes with rubber bulbs; in short, similar to our old traditional equipment. In the department of operative den-

## NORWEGIAN DIARY

tistry, I saw endodontic treatment performed in a molar without rubber dam applied, even without a saliva ejector. The head of the department, a stomatologist, graduated in 1945 after 7 years study, declared, when asked, that the rubber dam was used occasionally, but not in root canal treatment.

In the prosthetic department, acrylic dentures and bridges of stainless steel were demonstrated. The technical standard was high, but principles in bridge-work seemed somewhat antiquated, probably because gold was not available. Window crowns were used as bridge abutments on anterior teeth. The department of oral surgery seemed to be more a clinic for head and plastic surgery, and it had several hospitalized patients. In a room with many beds, there were treated and untreated cases of severe facial burns and others with tumors of the jaw. The treated cases showed a great competence in plastic surgery with tissue transplantation. Acupuncture was, according to the female director, not very much used in this department. One case of trigeminal neuralgia was treated with acupuncture while I was there: an old woman was sitting with three needles inserted in half of the face, and the needles were, through thin wires, connected with a battery apparatus and activated by emitted electric impulses. I was told that this treatment would give the patient a painless period of 3-6 months, but did not cure the ailment.

In the department of orthodontics, treatment was carried out both with fixed and removable appliances, and many successfully treated cases were demonstrated. A visit to the hospital's small pharmacy was interesting. When I entered, the staff was distilling some herb medicine, which was intended for general administration in periodontic cases.

**August 21.** Today, the exhibition started, and when we arrived just prior to opening, we passed a line, half a mile long, of patiently waiting people. An interpreter and a female dental practitioner, Mrs. Ching, had been assigned to our stand to assist in the demonstration. The latter had already been taught by me to operate the airturbine and to demonstrate the burs by drilling in teeth I had brought along, and by engraving with them on fresh

eggs without perforating the shell. That idea seemed to be a hit and brought crowds of visitors to the stand. Mrs. Ching perfected the technique and engraved halfway into the shells whole sentences in Chinese before an admiring public.

**August 22.** What a day! I have been to a hospital and seen patients being anesthetized with acupuncture needles and undergoing major operations, while I studied their faces and open eyes closely, photographed them with my polaroid camera, and showed them the pictures during the operations and observed them smilingly studying the snapshots.

I was received by the staff on the frontsteps of the hospital, given the appropriate attire and taken to the operating room, where a young woman with a tumor in the glandular thyroid was being prepared. Two short needles were inserted in the outer ear on each side and connected with a battery impulsator. After a period of 20 minutes, the incision was made across her throat, and the surgeons opened up to

the thyroid. She was calm and relaxed all the time and showed no detectable pain reaction. When the large-sized specimen had been removed, and the suturing was finished, she sat up and let me take a picture of her.

The second case was a young man with a damaged right kneejoint, from which the meniscus had to be removed. He turned over on the stomach, and the female acupuncturist let her fingers run down his back on the right side of the spine. Suddenly she pressed her index finger on a point in the lumbar region, thus producing a twitching of his right leg. Here a needle was inserted and another one contralaterally. Then he turned to his original position without help and two needles were placed in the abdominal region. All the needles were connected with the battery apparatus, and impulses were given for a period of 20-30 minutes. The kneejoint was then opened, and while the surgeons removed the meniscus, the patient conversed unaffected with the acupuncturist. When the operation was over, he lifted the leg from the table



Dr. Nygaard-Ostby is shown during a recent visit as lecturer to the Endodontic Graduate Program at the University of North Carolina. Dr. Nygaard-Ostby is seated. Standing are graduate students Drs. Joe Camp, David Whitaker and William Myers.

and held it unsupported in the air.

After the conclusion of the operation, I was taken to a conference room and served tea, while the surgeons and acupuncture specialists answered all questions. They readily admitted that they were unable to explain the mechanism of acupuncture. It stems from old Chinese traditional medicine dating back 2300 years, and had since then been employed to alleviate pain and cure sicknesses. In 1958 it had been tried in inducing anesthesia for a dental operation. It worked, and since then it has steadily been developed and simplified, especially when it was discovered that the manipulation with the fingers could be substituted by electric impulses from a battery apparatus.

They estimated that acupuncture anesthesia until now has been used in 400,000 cases, in Peking alone in 50,000, and the success ratio is 85 percent.

**August 23.** The Third Teaching Hospital of Peking Medical College is probably the most advanced institution for dental and medical education, and here today I attended tooth extractions and major surgery under acupuncture anesthesia.

A third upper molar was anesthetized with a needle inserted slightly frontally to the temporo-mandibular joint and manipulated for a short time. The patient showed no reaction when the gingiva was loosened around the tooth, and the tooth was extracted. In another case a lower third molar was anesthetized with one needle behind the angle of the mandible and one beneath this and a short distance from the first one. The luxation took some time before the tooth was lifted out, and the patient seemed relaxed and showed no signs of pain perception during the entire operation.

Major surgery was also demonstrated, and one case, a lobectomy, was especially impressive. Anesthesia was accomplished with only one needle in the lower arm on the same side, and manipulated during the operation, which was carried out without additional oxygen supply. The surgery was done on the right side, and the left lung could be seen through the opened chest, breathing regularly, while the patient appeared perfectly relaxed, smiled, and studied the photographs I took of him. After the needle was re-

moved and dressings applied, he moved himself easily to the stretcher without any evidence of distress.

**August 29.** The Friendship People's Commune is situated outside Peking, and it took us an hour's driving to get there. Mrs. Wang and I were received by its Leading Member, who gave a short speech about the Commune's history and present conditions. It had been established in 1958 and had now 38,000 members, who supported themselves by agriculture and forestry. They had food enough and sold milk and flour to Peking, and they delivered the Peking ducks, which is known as a delicacy for gourmets, something I experienced on several occasions.

At the health center there was one dental office, where a doctor worked half time. He told me that he treated an average of 10 patients a day, mainly by extraction. The office was sparsely equipped, and my impression was that very little conservative dentistry was carried out. He had some alloy and mercury, but no cements of any kind. The rest of the day he assisted the medical doctor in the adjoining room, where many ailments were treated by acupuncture.

The Communes are divided into brigades, which also have a sort of health center, but only manned by "barefoot doctors." I was taken to one brigade and visited a team of this kind of health personnel, young women and men. They told me that they had been chosen among the agriculture workers and sent to a hospital for training. After a short course in diagnosis and treatment of certain ailments with herb medicines and acupuncture, they had returned to the Commune and taken up their work again, while also practicing medicine. Their offices were in a small cottage with a beautiful garden, where flowers were grown and processed by themselves for medicines.

**August 31.** Today, the Premier Minister, Chou En-lai visited the exhibition. It was a great event, especially for all interpreters, who were in a tizzy from the moment it became known he was coming. When he came to our stand and shook hands with all of us, I let Mrs. Ching demonstrate for him, although I had some forebodings. She was quite nervous, and her hands shook. Nevertheless, she was able to carry out the drilling in a tooth and the engraving "How are you" in Chinese on an egg without perforating, while

the Premier was watching with interest. We gave her the egg to keep in memory of what probably will be the highlight of her life.

**September 3.** Day of departure. The beautiful airport received the Canadian Pacific Airlines plane with a peaceful runway, bathed in clear sunshine, to the applause of 181 Canadians and one Norwegian, who would be back in Vancouver 19 hours later. Dr. Lin Poo-King who had wished me welcome, was there again, wishing me welcome back and waving goodbye when we took off.

#### ADDENDUM

As mentioned in the diary, there were no statistics on the dental status of the population. In order to get a vague idea of the prevalence of caries and periodontal diseases, I tried the following procedure: The visitors to the exhibition came from various parts of the country, and our stand was passed by thousands of them, individuals from 10 to more than 60 years of age. Every day I picked out some of them and asked them to open the mouth, which they all did willingly and smilingly, when they understood I was a dentist. They kept the mouth wide open for so long a time that I could even scan the lingual surfaces of the teeth. The general trend was obvious: very little caries and very much dental calculus.

The front teeth were usually without caries or fillings but often crowded, and there were many cases with dental fluorosis, from mild to severe. In the children, the deciduous molars and six year molars were without observable caries, and only in a few individuals some amalgam fillings could be seen. In the adults, only some tipped wisdom teeth in the lower jaw were carious and had a history of pain. In old people some teeth could be missing, and this seemed to be due to periodontitis. This disease was observed in all stages. In young people, the overall picture was calculus and gingivitis, and in the older, the accumulations could be so abundant that they even reached to the occlusal surfaces lingually on the lower molars and showed signs of attrition.

My impression was that caries is a minor problem in the country, but that periodontitis is a serious one, probably due to the traditional view that a local pathosis only is a manifestation of a general disorder and should be treated systemically.

# Resolution of Apical Periodontal Cysts

William C. Myers, D.D.S.

**I**N the past the recommended treatment of apical periodontal cysts has been complete surgical enucleation. In more recent years there has been mounting evidence that the apical periodontal cyst will resolve following conservative endodontic therapy. This evidence is based primarily upon the relative incidence of apical periodontal cysts and the high percentage of successful healing of periapical lesions following non-surgical endodontic therapy.

Until several years ago most dental practitioners estimated that periapical radiolucencies were about 85 to 90 percent periapical granulomas and the remainder apical periodontal cysts. This estimate was based upon the clinical observation that in approximately 85 to 90 percent of teeth with apical lesions, the lesion either disappeared or was markedly reduced in size after conservative endodontic treatment. It was assumed that the lesions which healed (disappeared radiographically) represented periapical granulomas while those which persisted or became larger after conservative endodontic therapy were apical periodontal cysts. It has been shown in recent studies, however, that 42 percent of the apical radiolucencies are cysts and 45 percent are granulomas.<sup>1, 2, 3, 4</sup> These percentages are the same for pre-treatment samples and samples taken from endodontic cases which failed.<sup>1, 5</sup>

The success rate quoted by most practitioners and textbooks following conservative endodontic treatment falls somewhere in the range of 90 percent. The success rate of endodontics at the University of Washington Dental School was reported by Ingle.<sup>6</sup> In a two-year recall period consisting of 1229 cases, there was a 91.54 percent success rate. In another study of five years duration consisting of 302 cases, there was a 93.05 percent success rate.

This information concerning the suc-

cess rate of non-surgical endodontics, together with the current accepted increased prevalence of apical periodontal cysts leads to the obvious conclusion that cysts must resolve following root canal treatment. Many prominent investigators feel that this actually occurs.<sup>1, 2, 3, 6, 7, 8, 9, 10</sup>

Most authors<sup>11, 12, 13</sup> define a cyst as a pathologic epithelium-lined cavity usually containing fluid or semi-solid material. Investigators now feel that the lining of nearly all apical periodontal cysts is derived from the epithelial rests of Malassez, and that the cyst is merely a further differentiation of the periapical granuloma in response to the continued irritation from bacteria, or tissue breakdown products in the necrotic root canal. The epithelial lining may, in isolated instances, be derived from the maxillary sinus or oral epithelium (sinus tract or gingival crevice). In early cysts the epithelium is arranged in an arcing pattern with long sheets of epithelial cells surrounding fibrous connective tissue. Later the typical epithelial-lined lumen develops (Fig. 1). The proliferating epithelium of the early dental cysts is infiltrated with polymorphonuclear leukocytes. A smaller infiltrate of lymphocytes and plasma cells is also present, but these cells predominate in non-proliferating cysts.

The connective tissue wall of the cysts is usually composed of an inner and outer layer.<sup>6</sup> The inner layer, made up of inflammatory connective tissue, underlies the epithelium in all its ramifications (arcades). The outer peripheral layer is the true capsule of the cyst. In some lesions, collections of cholesterol slits with associated multi-nucleated giant cells are found in the wall of the lesion.<sup>10</sup>

Boyle<sup>13</sup> described the contents in the lumen of a cyst as gradually changing from purulent exudate to a clear fluid. Seltzer<sup>14</sup> feels that this fluid becomes mucopurulent when the cyst becomes infected. Most authors describe the clear fluid as containing many long, thin, spear-shaped crystals of cholesterol. According to Kleiner and Orten,<sup>15</sup> cholesterol is probably a constituent of all animal cells and may be found anywhere in the body where tissue decomposition takes place. The cholesterol is dissolved during the preparation of tissue sections for microscopic examination, but the spaces originally occupied by the needle-shaped crystals can easily be recognized under the mi-

croscope as cholesterol slits. Shear's<sup>16</sup> findings indicate that cholesterol slits are not a constant feature of dental cysts. He found cholesterol slits in 16.5 percent of dental cysts and in 28.5 percent of the fibrous cyst wall.

Boyle<sup>13</sup> stated that an apical periodontal cyst can originate in two ways: (1) An abscess cavity may develop in the granulation tissue surrounding the infected apex, and the epithelium, because of its inherent tendency to grow over raw surfaces, covers the walls of the abscess cavity; or (2) cystic degeneration may occur within the strands of proliferated epithelium.

Shafer, Hine and Levy<sup>11</sup> gave the following description of the development of the apical periodontal cyst, and most investigators now agree that

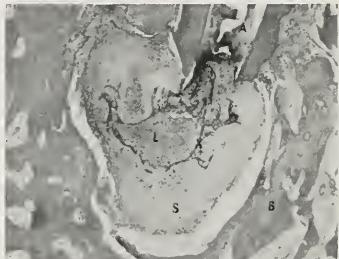


Fig. 1. A histologic section of a developing apical periodontal cyst. (Magnification, X25.) L, The cyst lumen. S, Connective tissue capsule. X, Epithelial lining. A, Root canal containing necrotic debris. B, Bone.

this is the usual mode of development for lesions of this nature:

The initial reaction leading to cyst formation is a proliferation of the epithelial rests in the periapical area involved by the granuloma. As this proliferation continues with the epithelial mass increasing the size by division of the cells on the periphery, corresponding to the basal layer of surface epithelium, the cells in the central portion of the mass become separated further and further from their source of nutrition, the capillaries and tissue fluid of the connective tissue. As these central cells fail to obtain sufficient nutrients, they eventually degenerate, become necrotic and liquefy. This creates an epithelium-lined cavity filled with fluid, the apical periodontal cyst. It is conceivable also that a cyst may form through proliferation of epithelium to line a pre-existing cavity formed through focal necrosis and degeneration of connective tissue in the periapical granuloma. However, the finding of epithelium or epithelial proliferation near an area of necrosis is not common, so the formation of a cyst in this manner is presumably uncommon.

Stafne and Milhon<sup>17</sup> feel that the growth potential of cysts is limited, and once there is cessation of growth, rarely is there a further increase in size. They

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explain the disappearance and decrease in size of cysts on the presence of drainage. If a cyst has a fistulous opening to the surface affording continuous drainage, the cyst will be destroyed.

Shear<sup>18</sup> feels that epithelial proliferation continues as long as the stimulus is present. When the stimulus is removed, proliferation ceases and the epithelium is then able to differentiate to a certain extent. Any increase in size is due to intracystic osmotic tension. Shear found desquamated epithelial cells in 86.5 percent of cyst cavities. These cells, deprived of nutrition, undergo autolysis resulting in a solution containing a large number of substances of smaller molecular structure. This has the effect of increasing the osmotic tension within the cyst cavity. It can be deduced from this explanation of cyst growth that when the irritant is removed, and the epithelium ceases proliferation, the cyst can only increase in size a relatively small amount, because the intracystic osmotic tension will reach equilibrium with the arterial pressure.

Considering the presence and potentialities of proliferating epithelium in periapical lesions, the development of residual cysts after extraction of teeth with such lesions might be expected to occur very frequently.<sup>19</sup> Most studies have not found this to be true. In 1946 Smith<sup>20</sup> did a complete oral radiographic examination of 1,000 edentulous patients and found residual cysts in only 0.8 percent. Ennis and Berry<sup>21</sup> completed a similar study three years later and also found less than one percent occurrence of residual cysts.

In a study by Mortensen, Winther, and Birn,<sup>2</sup> 753 lesions which were five millimeters or less in diameter (radiographically) were left in the bone after extraction of the teeth involved. All 753 lesions healed completely (radiographically) within two years, except five cases in which areas of rarefaction persisted. Biopsy of these five cases revealed fibrous scar tissue "without any inflammatory reaction or cyst formation." One can only speculate as to the frequency of apical peridental cysts in this group of lesions, but it would appear from the results obtained by most investigators that such cysts occur in small lesions. Mortensen, et al.<sup>2</sup> feel that although the pathologic tissue was left in the bone after extraction of the involved teeth,

healing in all 753 cases may be explained by the injury to the apical area caused by the tooth extraction. This led to inflammation and destruction of the epithelium lining the cyst.

Bhaskar<sup>22, 23</sup> suggests a similar mechanism of epithelial destruction in cystic lesions. He believes that instrumentation of the root canal slightly beyond the apex causes subepithelial hemorrhage with ulceration of the epithelial lining and a transitory acute inflammation resulting in epithelial destruction. The epithelium undergoes lysis, the cyst is transformed into a granuloma, and healing follows. He feels that routine endodontic procedures of instrumentation and obturation of the canal are sufficient to set up this destructive inflammation in many cases.

Molyneux<sup>10</sup> did serial sections and histologically examined 227 apical periodontal and residual cysts. He categorized these cysts into inflammatory and non-inflammatory groups. Cysts in the inflammatory group exhibited epithelial hyperplasia, increased vascularity, and inflammatory cell infiltration of the epithelium and the connective tissue capsule. Cysts in the non-inflammatory group showed either no evidence of inflammation or only a minimal inflammatory cell infiltration, and the absence of epithelial hyperplasia. He found a direct relationship between the structure of the epithelium and the inflammatory cell infiltration, vascularity, and cellularity of the adjacent connective tissue capsule. These findings suggested that the presence of an irritant, in the form of a necrotic pulp, induced tissue hyperplasia with resulting cyst growth, while elimination of the irritant resulted in tissue changes similar to those which occur in repair following inflammation. Molyneux felt that this increased density of acellular connective tissue "inhibits the movement of tissue fluid to the overlying epithelium which, deprived of nutrients, undergoes atrophy and is finally lost." The parallel relationship observed between acellular connective tissue and atrophy of epithelium is the basis of this hypothesis.

Seltzer, Soltanoff, and Bender,<sup>9</sup> after studying epithelial proliferation in periapical tissues, arrived at a somewhat similar conclusion as Molyneux. Twenty-two teeth in which periapical lesions were present prior to endodontic therapy were examined histologically at various time intervals following

endodontic therapy. Studies of the epithelium in seven specimens 56 to 220 days after endodontic therapy revealed that the epithelium was degenerating in three lesions. They feel that when the inflammation caused by the endodontic treatment subsides, the excess fluid is removed and fibroblasts begin to form. The epithelium is then trapped by the newly formed collagen fibers and degenerates as the blood supply to the cells is diminished. Like Bhaskar, they feel that minimal instrumentation beyond the apex in teeth with apical lesions is valid, but for different reasons.

Bhaskar theorizes that the resulting transitory acute inflammation destroys the cyst lining, whereas Seltzer and Bender feel that the resulting drainage and pressure release allows the repair process to encompass the epithelial lining. The epithelial cells then degenerate because of a lack of nutrition. Seltzer<sup>14</sup> feels that Bhaskar's hypothesis has the following faults: (1) Many investigators have observed that acute inflammation is commonly associated with the proliferating epithelium; (2) It has not been demonstrated that polymorphonuclear leukocytes are capable of digesting epithelium; (3) Occasionally the epithelium is absent, yet the cyst wall in most instances is not digested.

Toller offers still another explanation of cyst resolution.<sup>24, 25, 26, 27, 28, 29</sup>

He feels that a cyst grows by increased osmotic tension within the lumen and because the cyst is isolated from lymphatic drainage. He hypothesizes that resolution of a cyst will follow the access of lymphatic drainage to the lumen after infection or trauma. Recently Toller<sup>30, 31</sup> has shown that epithelial elements of periapical lesions may be destroyed immunologically. He states the following:

It may be important to note that in 1935 Wassmund demonstrated histologically that cyst epithelium disappears after deliberate burial beneath the oral mucosa.

We know that the admission of lymphatic access to the lumen of a cyst will render impossible the maintenance of a local osmotic imbalance, but it would also allow removal of really excessive amounts of gamma globulin and at the same time allow access of complement, the presence of which is necessary for successful humoral antibody action. It would also allow the free action of a cell-mediated process, possibly lymphocytic, whereby the epithelial cells could be destroyed. Thus the 'principle of lymphatic access' in cysts (Toller 1967) now seems to have acquired a cellular dimension as well as a purely physical aspect.

(Continued on page 33)

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*For want of a Nail, the shoe was lost;  
For want of the shoe, the horse was lost;  
For want of the horse, the rider was lost;  
For want of the rider, the battle was lost;  
For want of the battle, the kingdom was lost,  
And all from the want of a horseshoe nail.*

—Author Unknown



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President



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## Preliminary Program



# 117th Annual Session North Carolina Dental Society



James A. Harrell  
President-Elect



J. Harry Spillman  
Secretary-Treasurer

May 13-16, 1973

THE CAROLINA  
PINEHURST



Fred G. Hasty  
Chairman Executive Committee

# PERIODONTIUM AND PULP IN PINEHURST



Darden J. Eure, Jr.

Fellow Members of the  
North Carolina Dental Society:

The Annual Meeting of the North Carolina Dental Society will be held at the Carolina in Pinehurst May 13-16. We look forward to the enhancement of our professional association. In order to provide activities of mutual interest, the Annual Meeting will emphasize the avenues of professional education and professional fellowship.

The Scientific Sessions will deal with the tissues of the pulp and periodontium. The clinicians will cover these tissues from both the clinical and histological standpoint. These sessions are designed to give the individual practitioner a basis of theoretical understanding and practical technics which can be incorporated in private practice. Projected Clinics have also been scheduled so that Society members can participate in the Scientific Sessions.

The Golf Tournament will be held Sunday morning and Sunday afternoon will feature the Poolside cocktail party honoring the North Carolina Dental Auxiliary. There will be a reception and cocktail party Tuesday evening honoring the new members of the North Carolina Dental Society. This is to be followed by the Annual Banquet—which might be of unparalleled interest—and the Society Dance. Of course, the drawing will follow the Third General Session on Wednesday morning.

President Joe Johnson and the Annual Session Committee have done their best to make this the finest meeting yet; we need only your enthusiastic presence.

We look forward to seeing you in Pinehurst!

Darden J. Eure, Jr.  
General Chairman  
Annual Session Committee

## PROGRAM HIGHLIGHTS

### SUNDAY—May 13

- 8:00 a.m. Golf Tournament, Pinehurst Country Club  
12:00 a.m. American College of Dentists Luncheon,  
Crystal Room  
5:30 p.m. Social Hour—Honoring Dental Auxiliary  
8:30 p.m. First General Session  
Address: Dr. Joseph M. Johnson, President,  
North Carolina Dental Society  
Address: Dr. C. Gordon Watson, Executive  
Director, American Dental Association  
Report: Dr. John M. Faust, Trustee, Fifth  
District, American Dental Association

### MONDAY—May 14

- 7:30 a.m. District Officers Conference Breakfast  
9:00 a.m. Drs. Marvin M. and Edward F. Sugarman,  
Soft Tissue  
10:45 a.m. Dr. Frank B. Trice, Endodontic Therapy  
12:00 noon International College of Dentists Luncheon,  
Crystal Room  
2:00 p.m. Dr. Harold R. Stanley, Human Pulp Studies  
3:00 p.m. Drs. Marvin M. and Edward F. Sugarman,  
Occlusion  
5:00 p.m. Social Hour for Commercial Exhibitors, Pine  
Room  
5:30 p.m. Fraternity Hours  
8:30 p.m. Second General Session

### TUESDAY—May 15

- 7:30 a.m. Past Presidents' Breakfast  
9:00 a.m. Dr. Frank B. Trice, Endodontic Therapy  
10:45 a.m. Dr. Harold R. Stanley, Biology of Pulp Cap-  
ping  
2:00 p.m. Drs. Marvin M. and Edward F. Sugarman,  
Osseous Therapy, Diagnosis, Endodontics—  
Periodontics  
5:30 p.m. Reception honoring members and new mem-  
bers  
7:00 p.m. Annual Banquet  
9:00 p.m. Floor Show and Dance

### WEDNESDAY—May 16

- 9:30 a.m. Projected Clinics  
11:30 a.m. Third General Session and Installation of Of-  
ficers

## THE CLINICAL SIGNIFICANCE OF HUMAN PULP STUDIES THROUGH THE SCIENCE OF HISTOPATHOLOGY

An understanding of the influence of cutting procedures, liners, etching agents, primers and cleaning agents, as well as established space-age restorative materials on pulpal health in relation to cavity depth and patient response variability will be presented. The importance of reparative dentin, its rate of formation and the dilemma of its low prevalence in the high-speed era will be emphasized. The discussion will involve highlights on the need for registering the toxicity level of new dental products.



Dr. Harold R. Stanley is Professor and Chairman, Department of Oral Medicine, University of Florida College of Dentistry, a Diplomate, American Board of Oral Pathology and Past President, American Academy of Oral Pathology.

## THE BIOLOGY OF DIRECT AND INDIRECT PULPCAPPING PROCEDURES

Success or failure of pulpcapping is not a hit or a miss proposition. To derive maximum assistance from pulp tissue during such episodes of stress requires an understanding of its biologic potential. Gnotobiotic studies have greatly increased our understanding of such mechanisms. Because of the controversy and confusion existing today as to the use of steroids in pulp therapeutics, the "pros and cons" for their use will be presented. The fundamentals of pharmacology and therapeutics regarding drug purpose, nature and site of drug action, dose size and metabolism will be emphasized.



Dr. Marvin M. Sugarman is a Diplomate of the American Board of Periodontology and former Director of Graduate Study in Periodontology, Emory University School of Dentistry.



Dr. Edward F. Sugarman is a Diplomate of the American Board of Periodontology and Clinical Associate in Periodontics at Emory University, School of Dentistry.

## SOFT TISSUE THERAPY

Practical periodontal techniques will be discussed and step by step procedures will be demonstrated so that each procedure may be completely understood and utilized. This evaluation will include the techniques of subgingival curettage, gingivectomy, mucogingival extension and tissue grafting.

## OCCLUSION

Traumatic occlusion will be discussed in relationship to the effects on the periodontium and occlusion equilibration. Occlusal equilibration aid and the diagnosis and treatment of bruxism will be covered.

## OSSEOUS THERAPY AND DIFFERENTIAL DIAGNOSIS AND TREATMENT OF ENDO-PERIO PROBLEMS

Osseous lesions will be carefully presented with an evaluation of bone regeneration as well as specific procedures for bone grafting being illustrated. This session will include a discussion of differential diagnosis of the endodontic - periodontic problem and restorative treatment procedures for these teeth.



Dr. Frank Trice is Professor and Chairman, Department of Endodontics, and Associate Dean for Student Affairs.

## ENDODONTICS

Surgical and non-surgical management of a variety of conditions and problems encountered in endodontic therapy will be discussed. Subjects covered include: endodontic surgical procedures utilized in endodontic therapy, conservative treatment of periapical lesions, combined endodontic-periodontic retrograde lesions, obstructed canals, treatment of the wide open apical foramen, treatment of traumatic injuries, complete primary pulp therapy, overextension, resorption and traumatic perforations, poor seal, restoration of pulppless teeth, and effects of force in endodontics.

**NORTH CAROLINA  
DENTAL AUXILIARY**

Twenty-Third Annual Meeting  
The Carolina, Pinehurst

**SUNDAY, May 13**

- 1:30 p.m. Registration  
5:30 p.m. Social Hour  
8:30 p.m. North Carolina Dental Society General Session (Auxiliary members invited to attend)

**MONDAY, May 14**

- 8:30 a.m. Golf and Tennis Tournaments followed by lunch  
3:00 p.m. Executive Board Meeting—Azalea Room  
8:30 p.m. Annual Meeting—Azalea Room (Business, election and installation of officers, introduction of new members, door prizes)

**TUESDAY, May 15**

- 8:30 a.m. Past Presidents' Breakfast — Hotel Dining Room  
9:00 a.m. Registration  
10:00 a.m. Bridge Party — West Porch  
12:30 p.m. Annual Luncheon — Country Club of North Carolina (Honoring new members, wives of senior dental students, and special guests) Speaker: Mr. Lee Bounds, Commissioner, North Carolina Department of Corrections  
Executive Board Meeting—Immediately following luncheon  
7:00 p.m. Annual Banquet—Hotel Dining Room  
8:30 p.m. Entertainment and Dancing

**WEDNESDAY, May 16**

No scheduled events.



**NORTH CAROLINA DENTAL  
ASSISTANTS ASSOCIATION**

Annual Session  
Sheraton Motor Inn  
Southern Pines

**SATURDAY, May 12**

- 3:00 p.m. Registration—Lobby  
5:00 p.m. Nominating Committee—North Pro Room  
8:00 p.m. Board of Directors—North Pro Room

**SUNDAY, May 13**

- 8:30 a.m. Breakfast honoring Past Presidents and guests—Sandtrap  
9:00 a.m. Registration—Lobby  
10:00 a.m. First Session of General Assembly—North Pro Room  
2:00 p.m. General Session—North Pro Room  
9:00 p.m. Southern Hospitality Time—Elk's Club

**MONDAY, May 14**

- 8:30 a.m. Registration—Lobby  
9:00 a.m. Second Session of General Assembly—North Pro Room  
10:30 a.m. Educational Forum—North Pro Room  
12:30 p.m. Balloting—Sandtrap  
7:00 p.m. Plantation Banquet—Elk's Club  
9:00 p.m. Ante-Bellum Ball—Elk's Club

**TUESDAY, May 15**

- 9:00 a.m. Registration—Lobby  
10:00 a.m. NCDA Table Clinics—North Pro Room  
2:00 p.m. Third Session of General Assembly  
Installation of Officers  
Board of Directors Meeting—North Pro Room

**NORTH CAROLINA DENTAL  
HYGIENISTS' ASSOCIATION**

Twenty-Sixth Annual Session  
Whispering Pines

**SUNDAY, May 13**

- 4:00 p.m. Executive Council Meeting

**MONDAY, May 14**

- 8:00 a.m. Registration  
9:30 a.m. Opening Session  
North Carolina Dental Society Greetings  
North Carolina Dental Assistants' Association Greetings  
North Carolina Dental Auxiliaries Association Greetings  
North Carolina State Board of Dental Examiners Greetings  
10:00 a.m. District IV Trustee Address—Mrs. Margaret Cain  
11:00 a.m. Mrs. Meyressa Schoonmaker, Attorney-at-Law  
12:15 p.m. Champagne Luncheon Honoring Past Presidents  
2:00 p.m. Business Meeting  
3:15 p.m. Table Clinics  
Free Time for Carolina Inn Exhibits  
4:00 p.m. Junior Membership Meeting  
7:00 p.m. Cook-out Honoring Junior ADHA Members graduating

**TUESDAY, May 15**

- 9:00 a.m. Registration  
9:30 a.m. Periodontics for the Dental Hygienist — Drs. Marvin and Edward Sugarman  
10:30 a.m. Business Meeting  
Installation of Officers  
Adjournment

# Radiographs and the Periodontium

Walter T. McFall, Jr., D.D.S., M.S.\*

**ROENTGENOGRAMS** have been utilized as dental diagnostic tools for over half a century and have proven to be of inestimable aid in the planning, execution, and evaluation of therapy. In the diagnosis of periodontal pathoses the radiograph must be considered as only a supplemental addition to clinical findings. In far too many instances overreliance on the radiograph has resulted in misdiagnosis and incorrect treatment.

Basic diagnosis of periodontal disease states is best accomplished with use of visual examination, the periodontal probe, and intelligent appraisal of the dental occlusion. The radiograph primarily serves to clarify and reinforce the clinical findings. Certainly it can be contended that more accurate appraisals can be made by examination of the patient without radiographs than radiographs without the patient.

The purpose of the present article is to review the role of roentgenograms in relation to the periodontium. Attention is focused on technical considerations, normal anatomical landmarks, alteration due to pathoses, limitation inherent in radiographs, and diagnostic values.

**Technical Considerations.** It is not within the scope of this paper to deal with those aspects of radiology involving the technical methods relative to the securing, development, fixation mounting of dental radiographs. Excellent reference sources are available on these topics.<sup>1-3</sup> Obviously the value of a radiograph is in direct proportion to its individual clarity and inclusiveness. Of all the technical variants the most common seems to be lack of consistency. This inconsistency results in errors in angulation, kilovoltage, exposure time, development time, and fixation.

Increasingly, the acquisition and subsequent handling of radiographs is being delegated to dental auxiliaries. This represents a useful and proper utilization of activity. It does require additional care on the part of the dentist to insure that standardization of roentgenographic techniques are incorporated in practice to produce films of high quality and insure protection of the patient. A recent refresher book for auxiliaries is available.<sup>4</sup>

While bitewing radiographs may prove helpful for detection of caries they are not sufficient for a comprehensive diagnostic survey of the periodontium. A full series of fourteen films is required. Panoramic radiographs are of little worth in appraising the periodontium. They may be of benefit in providing an overview of both arches for screening purposes and for disorders of the temporomandibular joint. They can also be of value in disclosing previously unsuspected pathological conditions.

Overexposure, cone-cutting, lack of inclusion of periapical areas, overlapping of teeth, and angulations that result in elongations or foreshortening, all decrease the worth of the radiograph. Properly dark background mounts and good viewing lights enhance the usefulness of radiographs.

**Normal Anatomical Landmarks.** In the maxillary arch normal roentgenographic features are the maxillary sinuses, incisive canal, tuberosities of the maxilla, and exostoses. Mandibular radiographic landmarks include external oblique ridges, mandibular canals, mental foramenae, nutrient canals and genial tubercles.

Of primary significance in diagnosis and prognosis of teeth threatened with periodontal disease are the crestal alveolar bone, lamina dura, periodontal ligament space, and the length and shape of the roots.

Clinically the normal depth of the gingival sulcus interproximally ranges between 0 mm. and 3 mm. The alveolar crest height in health is approxi-

mately 1-1.5 mm. apical to the cemento-enamel junction. Interproximal bone crest heights are quite consistent in periodontal health and follow a contour parallel to the cemento-enamel junction.<sup>5</sup> Tilted teeth may be accompanied by an alteration in topography of crestal bone without any pathological lesion being present. A recent study suggests that although a slight loss of crestal bone height occurs with age the amount is clinically insignificant.<sup>6</sup> Thus interproximal bone loss, or diminished crestal dentistry, should be interpreted as evidence of past or current osseous remodeling.

**Radiographic Changes with Periodontal Disease.** Inflammatory alterations associated with periodontal disease are initially manifested in the gingival connective tissue. When the inflammation is confined to soft tissues, as in gingivitis, no changes can be noted on radiographs. Even in acute gingival disturbances such as necrotizing ulcerative gingivitis, radiographic changes are absent.

Extension of the inflammatory infiltrate occurs in the connective tissue peripherally to the vascular bed.<sup>7</sup> Interproximally there is usually a large vessel piercing the alveolar bone. Inflammation is thus carried to deeper supporting structures. Bone is resorbed in response to the inflammation process and a scooped-out area or saucer-shaped defect results. This causes a reduced trabecular pattern and a decrease in density. This appears on the radiograph as horizontal bone loss and diminished crestal density. With progressive destruction continued loss of cancellous bone and even cortical plate transpires. This is reflected radiographically as further irregular horizontal bone loss.

When excessive occlusal stresses are superimposed upon pre-existing periodontally weakened teeth they may become destructive by altering the course of the inflammatory infiltrate.<sup>8</sup> Such alteration results in increased bone loss and radiographically this is indicated

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## RADIOGRAPHS AND THE PERIODONTIUM

by steeper interproximal radiolucencies approximating vertical osseous loss. In both primary and secondary lesions of occlusal trauma, widening of the periodontal space, and modifications in the lamina dura appear on roentgenograms.

**Limitations of the Radiograph.** At best roentgenograms represent only a two dimensional static picture of three dimensional calcified portions of the periodontium. The radiograph cannot provide indication of preexisting conditions, presence or absence of periodontal pockets, soft tissue and hard tissue relationships, tooth mobility, or osseous morphology on facial or lingual aspects of teeth.<sup>9</sup>

Bone height cannot be accurately determined on radiographs on the facial or lingual aspects of the tooth because the root structure effectively blocks the x-ray beam. When roots are fused in multirooted teeth osseous defects in furcations are also poorly presented. Exostoses, thick cortical plates, and mandibular tori all may create difficulties in assessing interproximal bone levels.

A considerable lag time may occur between alteration in connective tissue due to periodontal destruction and detectable radiographic changes. Presence of interproximal osseous destruction seen on radiographs may indicate chronicity. An exception to this is observed when rapid loss of bone occurs in acute conditions such as periodontal abscess, periapical lesions, or traumatic injury.

Operator reliance solely on the radiograph may be particularly misleading in instances of gingival recession. Often gingival recession is accompanied by a concomitant reduction in alveolar crest height. In these instances no inflammation or pockets are present and no therapy may be indicated.

**Value of Radiographs.** When combined with other clinical criteria, radiographs may serve as useful adjuncts in diagnosis of periodontal disease and treatment planning for periodontal therapy. They should not, however, be utilized as the only criteria. Some older concepts such as radiographic evidence of osseous loss in the furca region no longer should be employed as rationale for condemning a tooth to extraction. Likewise, the radiographic formulas relating to loss of one-third

or one-half the bone support do not have modern application. With newer endodontic, periodontic, and restorative procedures, teeth that once were considered untreatable can remain as functional units.

Certain etiological factors are detectable on radiographs including caries, calculus, faulty restorations, open contacts, and marginal ridge discrepancies. All of these may be implicated in periodontal disease and their presence may often be ascertained on radiographic examination. Diagnosis and prognosis are thus enhanced by the radiographic survey. Root lengths, root topography, and root divergence in multirooted teeth are also best evaluated from radiographic evidence. Crown to root ratios coupled with these factors may assist the operator in determining whether to maintain a tooth and utilize it as an abutment for fixed or removable prosthesis.

Radiographic series secured over a span of time can be employed as a sequential health barometer for osseous structures. Previous series of radiographs can aid in judging the progression of disease and the resistance of the individual to etiological factors responsible for disease.

With resolution of inflammation osseous destruction is halted. Gradually a restoration of crestal bone density occurs. In vertical intraosseous lesions evidence of new bone growth may be noted. Narrowing of periodontal spaces and increased trabeculation may become radiographically apparent. In some acute situations such as periodontal abscesses or traumatic injury, a fairly rapid bone regenerative process transpires with resolution of the inflammation. More commonly, osseous remodeling requires from six months to a year to produce significant radiographically observable change.

Increasingly, the radiograph is being employed as a tool to evaluate therapy. Thus longitudinal healing subsequent to osteoectomy, osseous grafting procedures, and combinations of endodontic-periodontic operations can be followed by radiographic changes.

Prevention of dental diseases is becoming of paramount importance. Education and motivation of the lay public are basic to the successful prevention of disease states. A full series of radiographs can be of real value in alerting an individual to the nature of his own health. Thus radiographs can serve to visually explain those neces-

sary procedures which must be accomplished to restore or to preserve the dentition.

**Summary.** Radiographs may be employed as a useful supplement in the diagnosis, treatment, and prognosis of individuals afflicted with periodontal disease. Their effectiveness is enhanced by using radiographs in conjunction with other clinical criteria. Radiographs should not be relied on as a primary diagnostic device because of their inherent limitations.

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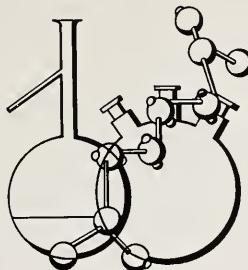
Annual Session

The Carolina

Pinehurst

May 13-16, 1973

# Etiology and Pathogenesis of Cleft Palate



## inside dental research

Gary R. Smiley, D.D.S., M.Sc\*

CLEFT lip and/or cleft palate is the most common, congenital oral-facial anomaly that confronts the dentist. This brief communication will describe basic research on cleft palate etiology. To narrow the subject further, only clefts of the secondary palate will be discussed, since clefts of the lip and primary palate are entirely separate embryological and developmental entities.

The secondary palate develops from the maxillary processes as two vertical outgrowths on either side of the tongue. These palatal processes re-orient themselves from a vertical to a horizontal position above the tongue and contact each other in the midline at around the 47th day of gestation in humans. The epithelium, which was present in the midline between the palatal processes at first contact, rapidly degenerates to be replaced by mesenchyme, and a connective tissue suture eventually develops in the hard palate.

The interests in our laboratory are: 1) to study various growth parameters of the craniofacial complex, and 2) to examine the ultrastructure of the palatal processes prior to, during and after closure of the secondary palate in both normal and spontaneous cleft mice. Studying normal craniofacial development and the differences between normal palatal development and spontaneous cleft fetuses can add to our knowledge and understanding of the mechanisms involved in normal palatogenesis and the etiology of cleft palate formation. These metrical and electron microscopic studies will also give a baseline from which to examine teratogenically-induced clefts of the secondary palate.

### MATERIALS AND METHODS

Mice of the A/Jax strain are among the few animals that have 10-15 per cent naturally occurring (spontaneous) clefts of the lip and/or palate that closely resemble clefts in humans<sup>1</sup> (Fig. 1). A colony of A/Jax mice is maintained in the Dental Research Center, so that precise control of breeding times and fetal ages can be assured.

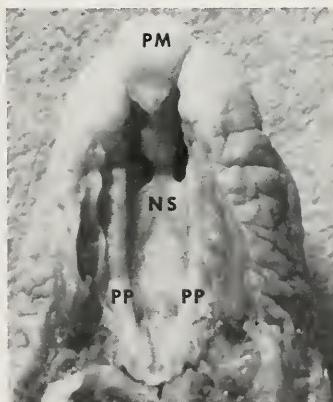


Fig. 1: Bilateral cleft lip and palate in a neonatal mouse. Neonatal A/Jax mouse head with a bilateral cleft of the lip, primary palate and secondary palate. The premaxilla (PM) is premaxillary and the cleft of the secondary palate is very wide. Nasal Septum (NS), Palatal Process (PP).

When cortisone, a specific teratogenic agent, is administered to a pregnant A/Jax mouse, clefts of the palate can be induced in 100 per cent of the fetuses.

A number of independent cephalometric studies were carried out to examine the length, width and height of the craniofacial complex.<sup>2, 3, 4</sup> A/Jax

mice were bred to obtain fetuses before, during and after closure of the secondary palate. Histological sections were prepared in the frontal and sagittal planes, and cephalometric photographs were taken of specific sections from which angular and linear measurements were made.

The second approach to the etiology of cleft palate was an examination of the epithelium along the medial edge of the fusing palatal processes using electron microscopy and organ culture techniques.<sup>5, 6, 7, 8</sup> Palatal tissues were dissected out of fetuses at different stages of development and prepared for electron microscopic examination. Cultural palatal explants were harvested at 24 and 48 hours, and they were also prepared for ultrastructural examination.

### RESULTS

**1) Metrical Investigations.** There was no growth spurt in mandibular length *per se* during palatal closure, and neither micrognathia nor retrognathia in the cleft specimens was observed.<sup>2</sup> There was a significant increase of mandibular width in cleft mice compared to their normal uterine mates.<sup>3</sup> Nasal septal length was less in the spontaneous fetuses than in the normal animals, even though the premaxilla in the cleft specimens was protrusive<sup>4</sup> (Fig. 1). A plateau in maxillary width during the critical time for palatal closure was observed in normal A/Jax mice while in the cleft fetuses, maxillary width increased throughout the time span studied.<sup>3</sup> When maxillary and mandibular lengths were compared, a relatively greater rate of increase in mandibular growth than maxillary growth was observed.<sup>2</sup>

The most significant difference be-

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## ETIOLOGY AND PATHOGENESIS OF CLEFT PALATE

tween normal and spontaneous cleft A/Jax mice was found in the height of the craniofacial complex.<sup>2</sup> Normal mice showed a very significant increase in height only, during the critical period for palatal closure, while cleft mice lacked such an increase. This increase in the vertical dimension was basically due to mouth opening, since there was a significant increase in the angle the mandible made with the posterior cranial base. The cranial base angle itself was not significantly different in normal and cleft fetuses.

**2) Electron Microscopic And Organ Culture Investigations.** After the palatal processes reach a horizontal position, the epithelia along the apposed medial edges must adhere, after which the midline epithelium normally degenerates to allow for mesenchymal fusion.<sup>5</sup> These degenerative changes have been demonstrated ultrastructurally in our laboratory in rodents as well as in humans and were found to occur before contact of adjacent palatal processes.<sup>6, 7, 8</sup> Electron dense granules of a lysosomal nature were observed in the epithelium that formed in the midline,<sup>5</sup> and there was indirect evidence that differential growth (mesenchymal proliferation and decreased midline epithelial mitosis) aided in the disruption of the midline epithelium.<sup>9</sup>

Fetal heads collected from therapeutic abortions have been used to examine normal human palatal processes. Comparison with rodent material has indicated that morphologically similar developmental events occur in both species, although the human material illustrated a more exaggerated response.<sup>8</sup>

Organ culture of single palatal processes demonstrated that contact with an adjacent palatal process is not necessary for epithelial degeneration to take place.<sup>7</sup> The medial edge of the palatal process in spontaneous cleft A/Jax fetuses was examined one day after normal palatal closure should have occurred, and epithelial degeneration was seen.<sup>7</sup> Therefore both *in vivo* and *in vitro* results indicate that epithelial cell death can occur without physical contact of adjacent palatal processes.

## DISCUSSION

The metrical data raised questions regarding the functional matrix and

growth centers, and several clinical conclusions can be considered.

The protrusive position of the premaxilla results from its forward relocation due to the muscular imbalance and tongue pressure created by the cleft of the lip and primary palate, rather than to an overgrowth of the nasal septum. If the mechanism is similar in humans, then a surgical setback of the premaxilla that involves the nasal septum would be contraindicated. The premaxilla should be relocated posteriorly by orthopedic procedures to prevent retarded growth of the middle third of the face.

The wide maxilla seen in newborn cleft patients is due to the imbalanced facial and tongue musculature, and this in turn affects the mandible through the buccinator musculature, causing the mandible also to be significantly wider than in normal infants. The posterior crossbites often observed after surgical closure of the palate may not be due only to scar tissue contraction but can be attributed as well to a wider than normal mandibular width, which occurs in fetal development.

One of the most significant contributions to normal palatal development may be those factors affecting the vertical dimension. Experimentally, one category of agents has been shown to prevent an increase in the vertical dimension by causing fetal edema or abnormal fetal posture, or by inhibiting fetal mouth opening reflexes. Among the drugs that might be prescribed for pregnant dental patients during the critical time for palatal closure (47 days *in utero* for humans) are antihistamines and sedatives. There are many variables regarding this aspect of teratology, one of which is the time of administration of the drug, since some patients do not realize they are pregnant by the 47th day after conception!

The information obtained from the ultrastructural and *in vitro* studies indicates that epithelial cell death can occur prior to palatal contact. The phenomenon of programmed cell death is common in organogenesis. If the "biological computer" is altered and epithelial cell death occurs too early, the lack of normal epithelial adherence may result in a cleft of the palate. Specific clinical cases of cleft palate may be explained by the above hypothesis, whereas other etiologic mechanisms cannot account for this occurrence.<sup>10</sup> A clinical analogy to the proposed theory is the case where the dentist, encounter-

ing a necrotic wound in the oral cavity, would not suture the degenerated edges of the wound. Rather, he would clean the wound, freshen the tissue edges and approximate them before suturing, to obtain good healing. Therefore if early cell death were to occur along the medial edge of the developing palatal processes, even though they could make contact in the midline, the possibility of adherence would be unlikely.

Clinically, support for the above theory is found in epidemiological studies demonstrating that females have a higher frequency of cleft palate than males<sup>11</sup> and that palatal closure occurs later in females than in males.<sup>12</sup> This increased time for closure, in females, could allow for more cell death to occur, and therefore epithelial adherence could be reduced. It has also been shown that the palatal processes in most clefts are horizontal but do not meet in the midline.<sup>13</sup> Therefore, palatal repositioning does not seem to be the major factor in cleft palate etiology unless it is delayed, where again, programmed cell death could be an important factor. Also, as pointed out in the metrical study described above, there is a plateau in maxillary width at the critical time for palatal closure. If there is a delay in palatal movement, the differential growth that occurs could result in a head that is too wide to allow for palatal contact; that is, when the processes become horizontal, the maxilla could be in the period of growth beyond the plateau when the maxillary width is increasing again, and therefore, the processes could not make contact.

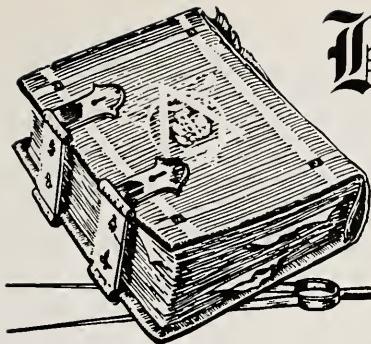
## SUMMARY

Since the etiology of cleft palate is multifactorial and encompasses both environmental as well as genetic mechanisms, dentists can play a part in the prevention of this congenital anomaly. Control of environmental factors, e.g., drugs, viral immunizations, and radiation may help reduce the incidence of cleft palate in children.

## ACKNOWLEDGEMENT

The author wishes to acknowledge Drs. A. D. Dixon, W. E. Koch, R. C. Vanek, J. C. Hart and W. J. Babula for their significant contributions. This investigation was supported in part by PHS Research Grants DE-02668 and RR-05333.

(Continued on page 33)



# Book Reviews

**20,000 Medical Words.** Robert W. Prichard, and Robert E. Robinson, III, 269 pages. Paperback, 6 in. x 4 1/4 in. New York, McGraw-Hill Book Co., 1972.

This "dictionary without definitions" is a medical corollary to an idea pioneered almost forty years ago by Louis Leslie in his 20,000 *Words*. This idea was based on the fact that a dictionary is used for spelling and word division rather than for definitions to a great extent. This small, inexpensive, and easily handled book is intended to serve the medical user as Leslie's book serves the general user. There are no definitions in this book.

The authors state that these words were selected "in large measure on a computer-aided analysis of almost 10 million words contained in such medical documents as histories, physical examinations, operative reports, pathology reports, and the like."

This book is unique and probably includes a majority of the words that are in reasonably common usage in medicine, dentistry, and allied fields; as such, it could be quite useful for persons who have a need for spelling and word division reference only. The format is neat and attractive; the paper and printing is good; the location of a given word is easily and quickly accomplished. Not all words are included so it does not replace a standard medical dictionary entirely, even for its intended purpose, but its handiness should make it worth having.

RICHARD E. RICHARDSON

**Sedation, Local and General Anesthesia in Dentistry.** Jorgensen, Niels Bjorn and Hayden, Jess, Jr. 163 pages plus 70 anatomical plates. Price, \$9.50. Philadelphia, Lea & Febiger, 1972 Edition.

The control of fear, anxiety and pain is of major importance to the clinician. Discussion of these factors as the theme of the book make it desirable reading for the clinician or student. While written to facilitate reading, it still provides adequate detail for understanding.

The book is comprised of four sections having two to four chapters, each authored by an authority on the subject. Topics follow a logical format beginning with physical and psychological evaluation of patients and continuing through such subjects as sedation, local and general anesthesia, venipuncture, nerve block techniques and oral and facial anatomy. Included is a thorough discussion of the chemistry, general pharmacology, mechanism of action, toxicity and metabolism of local anesthetic drugs.

The appendix includes a list of many commonly used drugs, their generic and trade names, use and manufacturer's name.

Many dentists in the past have been fearful or uncomfortable using drugs other than local anesthetics in their practice. This book presents a reasonable basis for their use in the control of anxiety, fear and pain, and ample understanding to instill some confidence in the clinician.

RICHARD E. ANGLIN, JR.

**Endodontontology: Biologic Considerations in Endodontic Procedures.** Samuel Seltzer, Professor and Chairman, Department of Endodontics, Temple University. 488 pages plus 350 anatomical plates. Price \$25.00. McGraw-Hill Book Company, 1971 Edition.

In view of several reports in the literature about the clinical and empirical steps in the biomechanical preparation of root canals, this book brings forth the biological concepts that are an integral and vital part of endodontics.

Following a description of the root apex and its surrounding structures, the book explains possible reasons for continued periapical irritation and pain, whether sterilization of the root canal is ever achieved, and when a canal is ready for obturation. Another section describes the many types of irritants which may cause periapical inflammation. These were classified as physical and chemical, which includes the reaming and filing procedures, irrigation, root canal dressings, and filling materials.

An important chapter on microbiology provides information about results on successes and failures of root canal therapy with regards to positive and negative cultures. There is a chapter which discusses bacteremias that may be caused during the course of endodontic treatment. In conjunction, it mentions local and systemic factors affecting repair following completion of therapy.

The book finishes with periodontic-endodontic problems and replantation and transplantation.

The book is good for practitioners and advanced students of endodontics, in that it helps explain why their successes and their failures may have resulted, and how they might have approached certain cases differently. No matter how good one's technique is in performing endodontic treatment, he will better understand the *why's* if he treats the situation as a biological one.

A. J. ZAYTOUN

## BOOK REVIEWS

**Introduction to Endodontics.** Birger Nygaard-Ostby. 83 pages, illustrated. \$6.50. Scandinavian University Books, 1st edition, 1972. Available only from Endowment and Memorial Foundation of the American Association of Endodontists, P. O. Box 11728, Northside Station, Atlanta, Georgia 30305.

Dr. Nygaard-Ostby has prepared a mini-text comprising the basic and important facts in Endodontics. Basic Endodontics consists of the Pathology of Pulp and Apical Periapex, diagnosis, medicaments, root filling, armamentarium and treatment. The book contains just that.

The booklet is a mirror image of Dr. Nygaard-Ostby's philosophy, his beliefs and the results of some of his far reaching research. Dr. Nygaard-Ostby has long been an advocate of the partial pulpectomy and he devotes an entire chapter to the clinical procedure along with excellent histologic reproductions.

The name Nygaard-Ostby and EDTAC (Ethylenediamine tetra-acetic acid) may just as well be synonymous as well as Nygaard-Ostby and Kloroperka N-Φ. Their formulas and others are revealed in the text.

Not all of the clinical material is substantiated with research, however it is well-padded with his endless years of clinical experience. Clinical success, empirical as it may be is the goal of the practitioner.

The small booklet consisting of some 83 pages with international references would serve as a memento of an apostle of Endodontics. The collective sound principles of Endodontics can be read in less than one hour.

The sale of the mini-text is limited and is solely available in the United States through the Endowment and Memorial Foundation of the American Association of Endodontics, a portion of the proceeds are donated to the Foundation.

ANDREW E. MICHA NOWICZ

**Oral Pathology.** Sponge, J.D. 487 pages, 734 illustrations. \$17.75. C.V. Mosby Co., St. Louis, 1973.

This is the first edition of an oral pathology textbook designed to teach basic principles of oral disease in a simplified manner to undergraduate dental students. The author is a well recognized Canadian teacher of oral pathology. He has received collaboration in this endeavor from authorities in fields which compliment his areas of expertise. The result of the collective effort is an easily understandable, abundantly illustrated basic textbook.

The outline of topics is an abrupt departure from the classic outline of oral pathology. The book is divided into six parts: Common dental diseases, Diseases of the teeth, Diseases of the gingiva and periodontium, Diseases of the jawbone, Diseases of the oral mucosa and Miscellaneous diseases. The author feels that this area oriented approach is advantageous for the initial learning experience.

At the beginning of several sections, there are reviews of relevant basic science material. This review plus the numerous schematic drawings are designed to assist the student who has had little clinical activity but a good basic science background. The illustrations are abundant in number and adequate in reproduction, but too small for teaching purposes in several cases. The chapters on caries and gingival inflammation present background and current information succinctly. The chapter on odontogenic tumors is particularly lucid as would be expected because of Dr. Sponge's interest in this area.

In general, the book is far from being encyclopedic, however it should be useful for the undergraduate dental student, or for the general dentist who is seeking to be updated in the general knowledge of oral diseases.

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## MERCURY

(Continued from page 10)

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## CYSTS

(Continued from page 20)

He further suggests that partial removal of a cystic lesion, whereby some of the epithelium is either deliberately or inadvertently left in the connective tissues, will result in total dissolution of the remainder of the lesion.

It is an accepted fact today that cysts can be resolved without surgical intervention. The mechanisms under consideration for apical cyst resolution can be placed into the following groups:

- (1) Drainage is necessary to get resolution.
- (2) Acute inflammation will destroy the epithelial lining.

(3) Increased deposition of collagen, resulting in an acellular connective tissue capsule, prevents nutritional support of the epithelium.

(4) Access to lymphatic drainage with immunologic mechanisms destroy the lesion.

The most controversial aspect of these mechanisms is Bhaskar's suggestion that a small file or reamer be inserted 1 mm. beyond the apex to initiate an acute inflammation. Bender<sup>32</sup> feels that this may have some merit in cases with necrotic pulps. Bender warns, however, that while irritation may produce an acute inflammation with possible subsequent benefits, the same irritation may cause further epithelial proliferation. It has been shown that if the trauma is increased there is a higher incidence of epithelial proliferation.<sup>9</sup> This procedure, as with other mechanisms discussed, is only a theoretical hypothesis and is substantiated only partially with histologic evidence.

## CONCLUSION

Present evidence indicates, however, that the apical periodontal cyst will resolve without surgical intervention, and in the large majority of cases conservative endodontic treatment is the treatment of choice.

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## CLEFT PALATE

(Continued from page 30)

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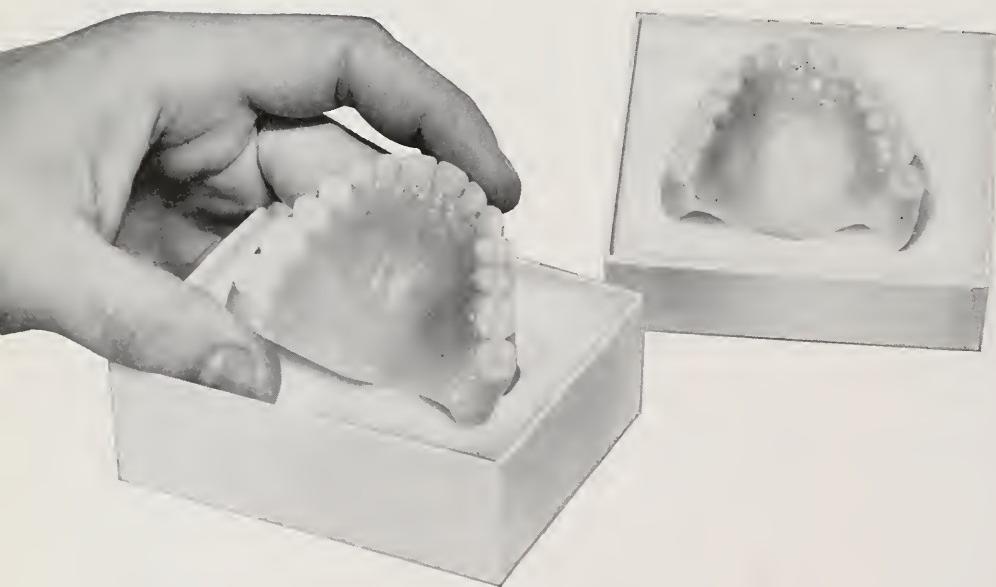
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A photograph of a group of people in a forest. In the foreground, a person in a red shirt sits on the ground. To their left, another person in a yellow shirt is seen from behind. To their right, a person in a white shirt stands near a campfire. The ground is covered in fallen leaves. A large tree trunk is prominent in the lower right. The background shows more trees and a path.

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# North Carolina DENTAL JOURNAL

VOLUME 56, NO. 3

AUGUST 1973

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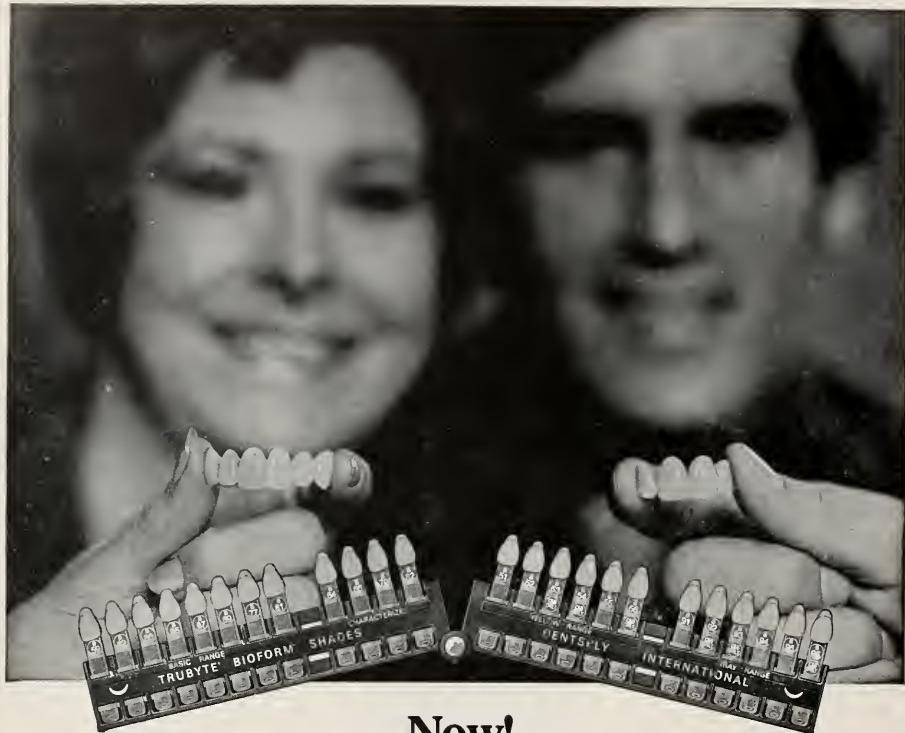


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# North Carolina DENTAL JOURNAL

VOLUME 56, NO. 3

AUGUST 1973

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Expressions of opinion and statements of supposed fact are the author's and should not be regarded as views of the North Carolina Dental Society.



# PRESIDENT'S REPORT

## Socialized Dentistry?

*"Destiny is not a matter of chance,  
It is a choice;  
It is not a thing to be waited for,  
It is a thing to be achieved."*

—WILLIAM JENNINGS BRYAN

In the past few years we have gone through an Educational Era. Most people believed that everyone was entitled to have the opportunity for an education. Many federal and state educational programs developed to fulfill the public's needs in education.

We are now in a new era, a Health Era, when most people believe that everyone is entitled to the opportunity of good health, stopping pain, and the relief of suffering. We are the only nation in today's world without a socialized health program.

If the health needs of the public are not served by the professions, our Congress will begin to produce more health programs. I sincerely believe that most of the United States Senators and Representatives do not want socialized medicine. However, they will be forced, by the general public, to produce more programs, if the public's need for reasonable health care is not satisfied. Several members of Congress are predicting now that we will have some type of Health Care Program in three or four years.

What happens to Dentistry in the United States cannot be blamed on politicians, a liberal government, the American

Dental Association or the North Carolina Dental Society. It is the responsibility of the individual dentist. I do not believe that the destiny of Dentistry in our country is a matter of chance. It is a choice!

Individual dentists cannot place their own welfare before the needs of the general public. The time is late and the future of Dentistry is a thing to be achieved!

We must participate with the government in improved programs for the indigent until their needs are satisfied.

We must participate in third party insurance programs.

We must diligently seek to adjust our fees to meet the need of humanity.

Perhaps it is not already too late to prevent a full socialized plan. I do believe we will have to work hard and fast and co-operate with Congress to produce some practical plans that could keep the practice of Dentistry the main responsibility of the dentists themselves. It is, for a short while, still up to us!

JAMES A. HARRELL

*"I will pass through this world but once.  
Any good thing therefore that I can do,  
Or any kindness that I can show to any human being;  
Let me do it now.  
Let me not defer or neglect it,  
For I shall not pass this way again."*

—(ANONYMOUS)

# Two Threats to Survival

## GUEST EDITORIAL



C. GORDON WATSON, D.D.S.  
*Executive Director\**

One of the most difficult challenges which any of us face today is the challenge of change. Change is made more difficult in our civilization because it is being experienced at a rate and direction never before by mankind. Historically, civilization has inched from a barbarian culture through an agricultural era into the industrial revolution and now is exploding into a technological dominance. Before we have time to adjust we are preparing to thrust ourselves headlong into a new "service economy." The genesis of the "service economy" starts from the need and demand of all members of society to partake of the "good things in life." Satisfying this demand will require the manpower of an ever enlarging proportion of the workforce.

An increasing demand for dental health and the personnel required to meet this demand will almost certainly put intense pressure upon the dental profession. The profession's willingness and ability to respond to this demand for change characterizes one of the two great threats to dentistry and its historical freedom to govern itself.

Many other specifics may easily be identified as major challenges and threats. If it were possible to question each of the 100,000 members of the American Dental Association regarding their own list of major challenges it is likely that, although the lists would differ, still a pattern would certainly emerge.

A consensus of challenges to the profession undoubtedly would include: demands for a changing system of delivering dental care, insistence upon peer review of the quality of dental care, pressures for preparing dental auxiliaries to perform expanded functions, acceptance of new theories of preventive dentistry by practitioner and patient alike, the growing tide toward denturism in America and the movement to unionize dentists and physicians.

As vital and as important as these challenges are to the profession, they are not, individually or collectively, the second greatest threat to dentistry. What then is the second greatest threat to our survival as a profession? Perhaps the answer to this question may be found in

asking a second question: What is required of the profession to meet the first threat—the demand on the profession for change?

To meet the demands for change the dental profession must be strong. In an era of big government, big business and big unions can the dental profession afford to be weak? The obvious answer is "no." But, are we willing to pay the price for strength? Perhaps herein lies our weakness and the second great threat to our survival.

To keep our physical bodies *strong* we must exercise. This exercise must involve muscles throughout our entire body. To exercise arm muscles alone will not prepare us for a foot race. To achieve real strength a muscle must be "flexed" to the point of exhaustion.

The "body" of the dental profession consists of four parts, i.e., the member, his component society, his constituent association and his American Dental Association. Weakness in any of the parts reduces the strength of the body as a whole. The key to the strength of the body of dentistry is the member himself. Unless the member is strong, the component is weak; if the component is weak, the constituent is weak; and the American Dental Association will be built on a weak foundation and, therefore, ineffective.

The key to the profession's strength and its ability to meet the first threat—demand for change—depends upon the strength of over 100,000 individual members. Unfortunately, many of our members are uninformed, inactive and disinterested. They don't attend meetings. They don't read journals and news letters and they don't participate in dental society programs for the profession and the community.

It may be a shock to learn that we may be proving the truth of an old cliche—"we are our own worst enemies." What can be done to solve this problem? When the answer to that question is found we may have discovered how to insure the survival of the organized profession as the voluntary agency representing dentistry in America.

American Dental Association\*

# EDITORIAL



## Marching Together

*In the Roman army of old the soldier carried a large oblong shield on his left arm. When a city was besieged the men in close rank locked their shields together over their heads and then marched in safety to the gate. So is it, in an organization where brotherhood prevails. We lock our shields over our heads as we march against the vicissitudes, the trials and temptations of life, and not over our own heads alone, but others are sheltered beneath them. A comrade falls, but our locked shields ward off hardship and penury from his widow and her little ones. A companion is prostrated with sickness, but he is cared for and the wants of both him and his are supplied.*

—Leaves of Gold\*



*The crest of the Prince of Wales bears the simple watchword, "I serve," and no more princely motto can be found.*

*We cannot determine whether our faces shall be beautiful or ugly, our bodies graceful or deformed. But the shaping of our life is in our own hands. We make that great or small, noble or mean, as we will.*

*The motto, "I serve," always betokens real power and lasting authority. More, it is a truly Christian motto and proclaims eternal kinship with the highest.*

—GEORGE HENRY HUBBARD

It is often said that a chain is as strong as its weakest link. Whether you are an officer in your dental society, a faculty member, a member of the State Board of Dental Examiners, or are primarily engaged in your busy practice, you are a vital link in the chain that may survive or fail in our present crises. To enumerate these again would be needless repetition. If you are not familiar with these problems you are remiss as a member of the North Carolina Dental Society.

If you are informed, don't bury your head in the sand and say "Oh well there is nothing I can do." *For there is something you can do.* First of all read Gordon Watson's Guest Editorial in this issue.

The future of dentistry and how you serve it depends

to a large extent on your becoming politically involved. If you don't know your local, regional, state or national lawmakers get acquainted! More than ever before, they are interested in what you are doing and what dentistry is all about. *They serve the people too you know!*

Recently, a legislator got into the hands of a "slick" artist and was about to lose his teeth before he accidentally fell into the hands of a periodontist who salvaged his natural masticatory apparatus. That politician has become informed and many he will inform, and better serve the people. Each legislator has a dentist. Are you his dentist? Perhaps it's time for his six months recall.

Make a check list of all whom you know with political clout and start getting our message across. You will then be added to the list of those who serve.—RJS.

\* The Coslett Publishing Co.

# LETTERS to the Editor



## North Carolina Dental Hygienists' Association

May 2, 1973

Chairman, Health Committee  
N. C. House of Representatives  
N. C. Legislature Building  
Raleigh, North Carolina

Re: Opposition of the N. C.  
Dental Hygienists'  
Association to *House  
Bill 1204*

Dear Mr. Chairman:

As President of the North Carolina Dental Hygienists' Association, it becomes my duty at this time to apprise you and the other members of the Health Committee of the opposition of our Association to House Bill 1204, which has been referred to you by its sponsors for consideration and recommendation. It is our firm belief that the public and the profession of the practice of dental hygiene in North Carolina will be dealt a severe blow by the passage of this bill, for some of the reasons which are set out below:

(1) It is our belief that a certified trainee from any of the armed forces of the United States can not have had the same amount of background preparation and education which would allow the high level of professional competence which we have been able to maintain through our existing educational institutions in North Carolina. We are certain that the veteran returning to civilian life, however competent he may be in the clinical aspect of the practice of dental hygiene, can not have had the benefit of institutional training in the areas of child psychology and the handling of children, patient management, educational materials and motivations, and the role of the hygienist in the community.

(2) In the situation proposed by House Bill 1204, we feel very strongly that not only would there be a lack of quality control in that there would be no accreditation of any of the various training courses offered by the various armed forces or other Federal institutions, but that the scope and quality of the training courses in the field of dental hygiene would tend to vary as between the various armed forces and Federal institutions. This bill would give blanket qualification to the veteran to stand for the state examination without any inquiry whatsoever by the state and on the state level as to the exact nature and quality of the program or programs of education attended by any of the veterans in question.

(3) One of the policies behind Bill 1204 appears to be to increase the availability of trained dental hygienists in North Carolina. We fear that this would be a blow to the existing program, which now graduates, at full capacity, a total of 215 hygienists per year. This program was only re-

cently enlarged and was the result of a heavy expenditure of state funds, which was aimed at graduating a total of 60 hygienists from the University of North Carolina and a total of 155 hygienists from six community colleges throughout the state. We fear that the consequences of flooding the market with service-trained personnel would tend to damage if not destroy the investment which has been made at institutions throughout the state. If these local institutions are not utilized, they might wither and die, thus leaving us where we were about four or five years ago. In the event that the armed forces are drastically cut back, and it appears at this time that they are in fact being cut back, we would be left in the unavoidable position of having a shrinkage of the availability of military trained personnel and of the local institutions and facilities with which to train our own citizens.

(4) Speaking specifically to the Bill before you, and with reference to the qualifications for examination for a license as a dental hygienist as set forth on Page 5 thereof, there does not appear to be a requirement to define or set forth the actual content of these various courses of instruction which may be required by the individual concerned, nor does there appear to be any requirement whatsoever that the individual have any clinical or practical experience, other than having completed the course of instruction required to qualify him for a rating. There also appears to be no guarantee that the rating achieved is measured by any standard or definition which would somehow relate to those standards or definitions set out by the North Carolina Board of Dental Examiners. We would urge the Committee to consider the fact that recent studies have shown that there exists a great variance between the various military programs, as to the training of dental hygienists for "dental ratings." (See Appendix I attached)

We of the Association realize that there is a strong policy, not only in this legislature but in other legislatures throughout the country, to take whatever steps possible to aid the returning veteran and to allow him or her to take advantage of whatever specialized training he or she has achieved while in the service of our country. The additional policy behind this proposed Bill is apparently to create an additional source or availability of specialized professional talent which is needed and sought throughout the state. We feel, however, that the people and the State of North Carolina would be paying too heavy a price for the support of these policies in the passage of legislation such as that which is set out in House Bill 1204.

Very sincerely yours,  
LINDA HEEKIN, President  
N.C.D.H.A.

## LETTERS TO THE EDITOR

Editor  
*Greensboro Daily News*  
200 N. Davie  
Greensboro, North Carolina

Dear Sir:

In response to your article, "The High Cost of Dentistry," which appeared in the April 29 edition of *Parade Magazine* carried in the *Daily News*, the article is thoroughly misleading by implication and by fact. The statement, "If you are facing the prospect of a dental bill of \$1,000 or more, chances are you can fly to Europe, stay two weeks or more, have the work done by a thoroughly competent dentist and end up spending less—the trip included—than the dental work alone would have cost in the United States," is attributed to a "consumer publication." In fact, this quote originated in an article by Bynum Shaw concerning dental treatment in Germany appearing in the travel section of the August 20 edition of the *New York Times*.

American Dental Association investigation of this article has cast serious doubts as to its validity. According to Dr. Braun, Director of the German Dental Association, "the story remains unbelievable to us." Dr. Braun gave the following

example: including materials and labor, a single gold crown or porcelain veneer crown might well cost \$151. This does not include initial examination, radiographs, or other required procedures. At the time Mr. Shaw wrote this article, he had in his possession a copy of a letter from the German Dental Association stating his allegation was in error. In conclusion, the Director of the German Dental Association states that the story "must be considered more of a hoax than as a factual report of the situation."

This can only be considered as irresponsible journalism on the part of *Parade Magazine*, particularly in light of the fact that evidence refuting this story was readily available. We hope that in the future, news features of this nature will be responsibly researched and accurately reported before being given national exposure.

Sincerely

RICHARD B. DAVIS  
ROBERT A. HERRIN  
Editors, *Bits and Burs*  
University of North Carolina  
School of Dentistry

RBD-RAH:dba

---

## NORTH CAROLINA DENTAL AUXILIARY

Mrs. Leonard Cashion

**First District Auxiliary Meeting**—The First District Auxiliary will be meeting at the Green Park Hotel in Blowing Rock. Plans are for cocktails and dinner dance with husbands on Friday night. Saturday will feature bridge, tennis, golf, and shopping. Saturday night the ladies will conduct their business meeting and there will be door prizes and entertainment. On Sunday the ladies will join their husbands for one of Green Park Hotel's famous luncheons.

**Second District Auxiliary Meeting**—A featured speaker for the auxiliary will be Mr. Jim Boulton from Charlotte, an expert in Extra Sensory Perception. Also featured along with Mr. Boulton will be Mr. Don Hudson, who is an expert in psychometrics. A fashion show will be featured during the luncheon on "Your Fashion Horoscope."

**Third District Auxiliary Meeting**—The Third District Auxiliary will meet at the Four Seasons Inn in Greensboro. The featured speaker is Mrs. Gregory Lewis, a certified graphologist.

**Fourth District Auxiliary Meeting**—The Fourth District will have its meeting at the Downtowner in Fayetteville. Plans for the program of the Fourth District Auxiliary are not complete at this time.

**Fifth District Auxiliary Meeting**—The Fifth District Auxiliary will meet at the Timme Plaza in Wilmington. Although their plans are not yet finalized, bridge and bingo along with a dance with the husbands will be featured attractions.

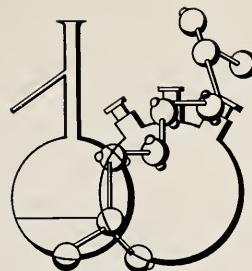
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## DUTY

All higher motives, ideals, conceptions, sentiments in a man are of no account if they do not come forward to strengthen him for the better discharge of the duties which devolve upon him in the ordinary affairs of life.

The Saying Of Omar Ibn, Al  
Halif. The Second Caliph

Four things come not back:  
The spoken word;  
The sped arrow;  
Time past;  
The neglected opportunity.



# inside dental research

Svein U. Toverud, D.M.D., Warren K. Ramp, Ph.D.,  
Miles A. Crenshaw, Ph.D., Wayne A. Gonnerman, Ph.D.,  
and Gerald L. Mechanic, Ph.D.\*

## Effects of Vitamin D on Developing Bones and Teeth

THE importance of vitamin D for normal formation of mineralized tissues has been recognized since Mel-lanby<sup>7</sup> in 1929 demonstrated hypomineralized and deformed bones and hypoplastic enamel in dogs after depriving them of vitamin D. Impaired mineralization was believed to be due to a subnormal calcium-phosphate concentration product in the plasma resulting from depressed intestinal calcium absorption.<sup>2</sup> Subsequently, a direct effect of vitamin D on intestinal calcium absorption has been shown with a variety of techniques in different species. This effect, which results in increased availability of calcium for normal mineral deposition, is probably the most important function of this sterol.<sup>3</sup>

Because of recent advances in the metabolism, toxicology and physiology of vitamin D, this vitamin is presently receiving considerable attention by research scientists as well as by public health authorities. Vitamin D has been found to undergo important biotransformation reactions in the liver and kidney leading to metabolites, such as 1,25-dihydroxycholecalciferol, which are more active than vitamin D<sub>3</sub> (cholecalciferol).<sup>4</sup> The formation of these more active metabolites appears to be regulated by negative feedback mechanisms similar to those that regulate the secretion of many hormones.<sup>5</sup> The postulated mechanism of action of the metabolites in the intestine is interac-

tion with the genetic mechanism,<sup>3</sup> which is similar to that of chemically related steroid hormones, but quite different from acting as coenzymes as do many vitamins. Therefore, some investigators are referring to vitamin D<sub>3</sub>, or the active metabolite, as a hormone rather than a vitamin.<sup>5</sup>

There has been a growing awareness of the relative toxicity of high daily doses of vitamin D.<sup>6,7</sup> Of all vitamins, vitamin D has the lowest ratio of toxic dose to physiological dose. The most serious toxic effect is hypercalcemia with resulting urinary calculi and soft tissue calcifications. Other effects in infants include decelerated growth and anorexia. Of particular concern is the evidence that certain infants have increased sensitivity to vitamin D. Toxic symptoms may occur in these infants after intakes of as little as 1600 U or only four times the recommended intake.<sup>6</sup> Because of the abundance of foods fortified with vitamin D and the relatively high vitamin D content of vitamin pills, an overzealous mother can easily provide her infant with a potentially toxic intake of the vitamin. This danger has finally been recognized by the Food and Drug Administration which has now restricted the over-the-counter sale of vitamin D-containing pills to those containing no more than 400 U.

A direct effect of vitamin D on osteogenesis or odontogenesis has never conclusively been demonstrated although recent evidence in experimental animals is highly suggestive of such a direct effect.<sup>8</sup> The purpose of

this report is to summarize the results obtained in the laboratories of the Mineralization Mechanisms Group as they pertain to the effects of vitamin D on developing bones and teeth and a possible direct effect of the vitamin on bone matrix formation. While rats were used to study effects on teeth, chicks were selected for all studies in which it was necessary to induce rickets, since rickets in chicks, as in humans, can be achieved by vitamin D-deprivation alone. In rats, on the other hand, it is also necessary to limit the dietary phosphate intake.

### MATERIALS AND METHODS

Eight-day-old suckling rats were given a single injection of 12,000 U vitamin D.<sup>9</sup> Three days later blood samples were obtained for serum calcium determinations and the rats were sacrificed and frozen. Freeze-dried, undecalcified sections were cut at the level of the molar teeth and stained histochemically for acid phosphatase using  $\alpha$ -naphthyl acid phosphate as substrate. Different enzyme inhibitors were added during the staining of some sections to distinguish between different acid phosphatase isoenzymes. Other sections were subjected to von Kossa staining to identify areas of mineral deposition. Acid phosphatase activity in tibias and molar tooth buds was also biochemically assayed in extracts of homogenates of these tissues using  $p$ -nitrophenyl phosphate as substrate.<sup>10</sup>

One-day-old chicks were fed one of three different diets that contained

\* Dental Research Center and Departments of Pharmacology and Biochemistry, University of North Carolina at Chapel Hill.

either no vitamin D<sub>3</sub>, a normal amount of vitamin D<sub>3</sub> or a high amount (50 times the normal) of vitamin D<sub>3</sub>.<sup>11</sup> At 1, 2 and 4 weeks, chicks from each group were sacrificed and blood samples were analyzed for serum calcium, phosphate and magnesium. Bone samples (tibia or femur) were collected for determinations of dry bone weight, percentage ash (percent ash weight of dry weight) and the profile of collagen crosslinks.<sup>12</sup> These intermolecular crosslinks are thought to be of functional significance by stabilizing the macromolecular collagen matrix.

## RESULTS

### Effects of High Doses of Vitamin D in Suckling Rats

Rats given a high dose of vitamin D developed marked hypercalcemia and increased acid phosphatase activity in bone undergoing resorption<sup>9</sup> (Fig. 1). However, the vitamin D did not seem to affect the enzyme activity in ameloblasts or odontoblasts. This difference between bone and tooth with regard to the behavior of acid phosphatase was also found when inhibitors were added to the staining medium. The enzyme activity in bone was markedly inhibited by fluoride but was resistant to tartrate. However, the activity in teeth was only slightly inhibited by fluoride and markedly inhibited by tartrate. In an earlier investigation it was postulated that the different responses of the enzyme activity to these inhibitors reflected the existence of different enzymes or isoenzymes.<sup>13</sup> The selective increase in bone acid phosphatase by vitamin D would seem to strengthen the postulate of the enzyme activity in bone being different from that in teeth. Presumably most of the activity in the regressing alveolar bone is lysosomal acid phosphatase in osteoclasts involved in bone resorption. The activity in the odontogenic cells, on the other hand, appears to be confined to the Golgi zone, a localization suggestive of the enzyme playing a role in matrix synthesis.<sup>14</sup>

The vitamin D treatment also resulted in ectopic calcification in front of the erupting teeth (Fig. 1c) and in the connective tissue between the teeth and the alveolar bone. In the latter area the calcifications were associated with cells showing acid phosphatase activity which was sensitive to fluoride and resistant to tartrate, i.e. the same type as at resorbing surfaces of bone. It is

therefore possible that acid phosphatase may be involved in degradation of ectopic calcifications.<sup>9</sup>

Biochemical assay of the acid phosphatase activity in extracts of homogenized bones and teeth has corroborated the main findings from the histochemical study, such as the stimulation by vitamin D of acid phosphatase activity in bone but not in teeth and the marked inhibition by tartrate of the activity in teeth but not in bone.

### Effects of Vitamin D in Chicks

The purpose of the initial part of this project was to identify the sequence of events in the development of rickets in newly-hatched chicks.<sup>11</sup> It

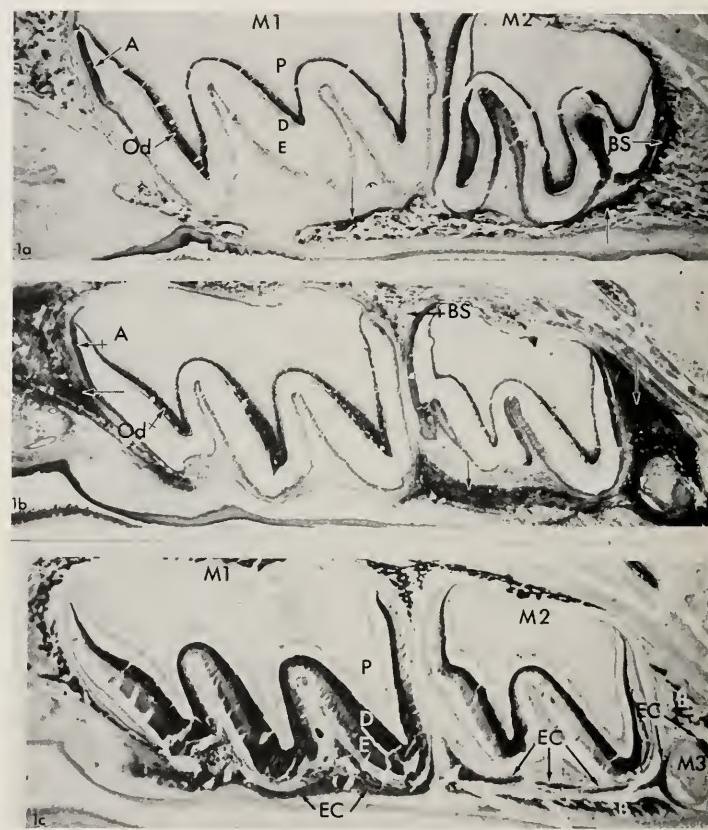


Fig. 1 a-c Effect of a single injection of 12,000U of vitamin D on the upper jaw of suckling rats. M1-first molar; M2-second molar; M3-third molar; A-secretory ameloblasts; Od-odontoblasts; B-bone; BS-bone septum; P-pulp; D-dentine; E-enamel; EC-ectopic calcifications.

a-b Sections stained for acid phosphatase activity. a. Control rat. The highest enzyme activities (arrows) are at resorbing surfaces of bone, in secretory ameloblasts and in odontoblasts. X15. b. Vitamin D-injected rat. The enzyme activity is greatly increased in bone undergoing resorption (arrows) such as the dental surface of the bony plate overlying the erupting second molar and the bone on the mesial side of the first molar and the distal side of the second molar. Note that there is no increase in the activity on the distal side of the interdental bone septum (crossed arrow) or in the ameloblasts and odontoblasts. c. Section of Vitamin D-injected rat stained with von Kossa and Kernecht rot. Ectopic calcifica-

tions (arrow) appear in front of the erupting first and second molars and around the germ of the third molar.

Figure 1. Crater-like elevation in the left buccal mucosa.

Figure 2. Granular, erythematous plaque over the lingual frenulum.

Figure 3. Discrete white gingival plaques.

Figure 4. Photomicrograph of well differentiated squamous carcinoma. 100X. H & E.

Figure 5. Photomicrograph of gingival carcinoma. 100X. H. & E.

Figure 6. Linear erythroplakia in the sublingual gland area.

Figure 7. Deep ulceration of the buccal mucosa from underlying muco-epidermoid carcinoma.

Figure 8. Photomicrograph of muco-epidermoid carcinoma and ductal metaplasia. 100X. H. & E.

Figure 9. Photomicrograph of the surface epithelium from the floor of the mouth carcinoma. 250X. H. & E.

was found that a small reduction in the serum calcium level could be observed as early as one week after imposition of the vitamin D-deficient diet. This effect was followed by two weeks by a rise in the serum phosphate level and an increase in the serum magnesium level. The classical decrease in bone ash percentage was also observed at two weeks, while a decreased rate of general growth was a late manifestation, evident at three weeks.

Although chicks given twice the normal amount of calcium in the vitamin D-deficient diet had a normal bone ash percentage, their serum calcium level was still below normal at two weeks<sup>16</sup> and the microscopic structure of the bone (particularly the width of the hypertrophic cartilage) was still abnormal.<sup>17</sup> It appears therefore that in addition to stimulating intestinal calcium absorption vitamin D may also exert a direct effect on bone formation. Other evidence in our study for such an effect includes the following: 1) a high, but non-toxic, intake of vitamin D (50 times the control) for only one week resulted in increased bone ash (percent of dry weight of whole tibia) in spite of the serum calcium level remaining normal.<sup>11</sup> 2) The increase in ash persisted for at least four weeks in trabecular (metaphyseal) bone, but not in cortical bone, from chicks fed the high vitamin D diet.<sup>18</sup> 3) Bone collagen from 4-week-old rachitic chicks had an abnormal ratio of specific crosslinks and crosslink precursors.<sup>12</sup> More recent results indicate that the abnormal crosslink pattern can be observed as early as two weeks, before any general growth inhibition can be observed.<sup>19</sup>

## DISCUSSION

The present studies have illustrated the role that vitamin D plays in normal and pathological mineralization. Within a wide dose range vitamin D stimulates mineralization of normally mineralizing tissues. While most of the effect probably is due to increased availability of calcium, some of our evidence suggests a direct effect of vitamin D on bone formation. The most interesting evidence is the abnormal bone collagen crosslink pattern in rachitic chicks which we demonstrated for the first time a year ago.<sup>12</sup> We postulated then that vitamin D may stimulate an enzyme, lysyl oxidase, which is involved in the formation of crosslink precursors. Such an action would be

consistent with the hypothesis of vitamin D interacting with the genetic mechanism to affect enzyme synthesis. By influencing the crosslink pattern vitamin D could play an important part in matrix formation and resorption and consequently in bone remodeling.

An observation also worthy of comment is the reduced serum calcium concentration as early as one week after the beginning of vitamin D-deprivation in chicks.<sup>11</sup> Presumably this reflects the important role that vitamin D plays in calcium homeostasis in situations when the need for dietary calcium is particularly great, such as during rapid growth and lactation. Removal of vitamin D from the diet of lactating rats for only one week resulted in marked hypocalcemia even though the diet contained a normal amount of calcium.<sup>20</sup>

Toxic doses of vitamin D lead to hypercalcemia and mineralization of soft tissues, exemplified in this study by the connective tissue surrounding molar tooth buds in rats. Toxic doses of the vitamin also increased the activity of acid phosphatase in resorbing bone. In addition to demonstrating for the first time a vitamin D-induced increase in acid phosphatase activity, we were also able to arrive at essentially the same conclusions by two widely different methods (histochemical staining and biochemical assay of tissue extracts using different substrates,  $\alpha$ -naphthyl acid phosphate and *p*-nitrophenyl phosphate).<sup>15</sup> The next phase of this work, separation and characterization of the acid phosphatases in bone and teeth, should contribute further to our knowledge of vitamin D as well as of bone and tooth formation.

## SUMMARY

The article summarizes the initial results of a multidisciplinary, collaborative study of vitamin D in young rats and chicks. Vitamin D in high doses can induce hypercalcemia, ectopic calcifications and a rise in the acid phosphatase activity in resorbing bone but not in odontogenic tissue in sucking rats. It is suggested that the latter effect reflects a difference in the structural and functional characteristics in the enzyme activity between the two tissues. At lower dose levels vitamin D has been found to stimulate bone mineralization, bone collagen crosslink formation and maintain calcium homeostasis perhaps, in part, by a direct action on bone.

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## ACKNOWLEDGEMENTS

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Attend Your  
District  
Meeting  
This Fall

# Cunningham

## Resigns



ANDREW M. CUNNINGHAM

Andrew M. Cunningham resigned as the executive secretary of the North Carolina Dental Society effective May 31, 1973. Mr. Cunningham served in the capacity as executive secretary for 18 years, and was the first executive secretary of the North Carolina Dental Society. "Andy" as he is affectionately known to all members of the North Carolina Dental Society was graduated from Davidson College in 1935 with a Bachelor of Science degree in Economics and Business Administration. He was a member of Beta Theta Pi social fraternity and he was elected to Omicron Delta Kappa, honorary collegiate leadership fraternity. Mr. Cunningham served on the faculty of Davidson College following graduation. Following his academic career at Davidson, he taught in the Morganton, North Carolina High School System.

Mr. Cunningham served four years with the United States Army during World War II. This included combat duty in Germany with the Ninth Armored Division where he obtained the rank of Captain.

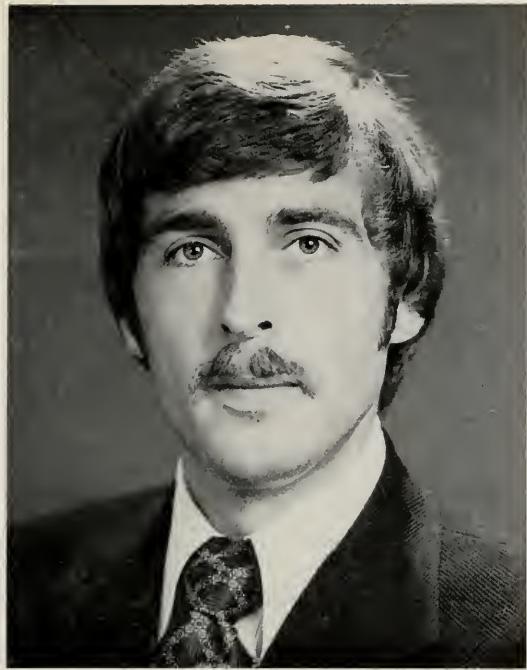
Following his military service he served five years as assistant to the President of Peace College. As Director of Development for Peace College he led a fund raising campaign which raised over \$300,000 for the College.

When Mr. Cunningham assumed the office of executive secretary of the North Carolina Dental Society there were 937 members registered. Eighteen years later at the time of his resignation the society had 1,601 members.

Mr. Cunningham has served as Chairman of the Board of Deacons and as an Elder of the First Presbyterian Church of Raleigh.

Mr. Cunningham has consented to serve as a consultant to the Dental Society and on the limited basis that his time will permit for the next two years.

The annual banquet in Pinehurst on May 14, 1974 will feature the formal recognition of Andrew M. Cunningham for his years of friendship and service to the membership of our State Dental Society.



ROBERT L. CHERRY

# Executive

# Secretary

# Appointed

Robert L. Cherry has been appointed as the new executive secretary of the North Carolina Dental Society. This appointment was effective June 1, 1973.

Mr. Cherry is a native of Norfolk, Virginia although he resided many years in Lexington and Charlotte, North Carolina and South Boston, Virginia.

Mr. Cherry received an A.B. degree in history from the University of North Carolina at Chapel Hill in 1967 and he was awarded a Masters degree in Business Administration from the University in 1973. During this latter period of residency at the University of North Carolina he was responsible as a counselor for sixty undergraduate students. During the interim between his residencies in Chapel Hill he served as a communications

administrative officer in the United States Navy aboard the U.S.S. *Bon Homme Richard*. Later Mr. Cherry served in Okinawa as a communications department head. During his three year Navy career he advanced from the rank of Ensign to Lieutenant junior grade and then to Lieutenant.

His hobbies are of the outdoor variety and include tennis, skiing, sailing, hunting and fishing. He is a handball enthusiast and an avid Tar Heel fan.

Bob Cherry comes to this office with a wealth of administrative experience and a fine educational background. We welcome him and wish him well in this new position.



## Morehead Foundation Fellowship

*"I have selected the education of our most promising youth as an objective of this trust in the belief that the most important investment that can be made for a people is that which is made in the education and training, as leaders, of those who have been endowed by their Creator with the capacity for leadership."*

With these words, John Motley Morehead described the creation of the Foundation which bears his name. The initial emphasis was in the undergraduate area, where young men were selected in a process modeled after the Rhodes Scholarships to Oxford University. The Foundation's activities later expanded into the graduate and professional areas of the University, with Fellowships in the Graduate, Law and Medical Schools, as well as the M.B.A. curriculum. Since the beginning of the Morehead Foundation in 1945, 631 Morehead Scholars and Fellows have earned degrees at Chapel Hill as of September 1972. These have gone forth from Chapel Hill to become leaders in business and professional life throughout North Carolina and the Nation.

In 1972, the Foundation recognized the excellence of the School of Dentistry by establishing a Morehead Fellowship for post-doctoral studies. The purpose of this Fellowship, as every other program sponsored by the Morehead Foundation, is to attract to Chapel Hill those students of superior character and achievement who show unusual promise of distinction. The Foundation is confident that the strength of the Dental School's post-doctoral program will ensure the fulfillment of this goal.

MEBANE M. PRITCHETT  
Executive Director  
Morehead Foundation

The School of Dentistry is pleased to acknowledge award of the first Morehead Foundation Fellowship in Dentistry. The School is proud to be associated with the outstanding traditions of the Foundation and to have this important Fellowship to assist in attracting the most outstanding students in the country to our graduate programs in Dentistry. The benefits of the program are already most apparent not only in the outstanding person selected for the first award, but in the opportunity to bring excellent candidates to the campus and acquaint them with our programs. We are most appreciative to the Trustees and Officers of the Morehead Foundation.

JAMES W. BAWDEN, Dean



*Dr. Roy V. Green, St. Croix, Virgin Islands, is the first Morehead Fellow selected to pursue graduate study in dentistry. Beginning with the fall semester 1973, Dr. Green, a graduate of the University of Indiana School of Dentistry, will enter a two year graduate program in Pedodontics at the University of North Carolina School of Dentistry. Since his graduation from Indiana he has worked as a Public Health Dentist from 1969-71 and as a general practitioner from 1971 to the present in Christiansted, Virgin Islands. He has served as President of the Virgin Islands Dental Association.*

# Measures of Success

Walter T. McFall, Jr.\*

Man has become dependent upon his own created systems of measure. Gradually these units have become the determinants of his success. Thus time not only is measured in hours, minutes, and seconds, but calculated in occurrences in those precious, fleeting instances.

So it is with institutions such as Universities. Their inception is noted on cornerstones, their buildings inscribed with Latin numbers, and their chairs of learning properly named and dated. In the state of North Carolina at a place named Chapel Hill, history records the inception of such an institution of higher learning as "opening its doors in 1795."

Some 150 plus years later that University began a program of study in the field of dentistry. From a temporary building there has emerged a complex of buildings, a distinguished faculty, and an institution with an international reputation for excellence in Dental Education and Research.

While bricks, books, and bigness are a way to measure success, they are in reality only a by-product. This year the twentieth class of graduates to receive the degree of Doctor of Dental Surgery stepped forward at graduation. This record of excellence in providing over 900 dentists to Carolina, the south, the nation, and mankind, is the truest measure of success. With justifiable pride, the University of North Carolina points to her alumni and says "Measure me by these."

\* Dr. McFall is Editor of the University of North Carolina School of Dentistry Newsletter.



Dr. Walter T. McFall, Jr.



20th year reunion Yaupon Study Club, U. N. C. School Dentistry. Left to right: Hal Lehland, John Couch, Maurice Richardson, Mett Ausley, Fred Lutz, Sandy Marks, Joe Johnson, Cliff Dummett (Chief Clinician), Ted Oldenburg, James Lee, Roy Lindahl, Hulon Lawson.

## MEASURE OF SUCCESS

*When sunset falls upon your day  
And fades from out the west,  
When business cares are put away  
And you lie down to rest,  
The measure of the day's success  
Or failure may be told  
In terms of human happiness  
And not in terms of gold.*

*Is there beside some hearth tonight  
More joy because you wrought?  
Does some one face the bitter fight  
With courage you have taught?  
Is something added to the store  
Of human happiness?  
If so, the day that now is o'er  
Has been a real success.*

—(Anonymous)



# first district news

Carey T. Wells, Jr., D.D.S., Editor

## First District Announces Fall Meeting



Dr. D. F. Hord

### PROGRAM—FIRST DISTRICT

#### Friday Afternoon September 28

Golf  
Cocktail Party  
Buffet Dinner  
Dance

#### Saturday Morning September 29

Table Clinics  
Projected Clinics

#### Saturday Afternoon

Dr. Carroll Bennett—"Prevention"

#### Saturday Evening

Dinner  
Business Meeting

#### Sunday Morning September 30

Dr. Carroll Bennett—"Prevention"  
Luncheon  
Final Business Session



Dr. Carroll G. Bennett

The First District Dental Society is returning to the Green Park Inn in Blowing Rock for their third straight year. The setting is a superb one and past Fall meetings have been most successful and pleasant in these surroundings.

The First District is pleased to invite its friends from the other Districts for September 28, 29 and 30. A golf tournament highlights the beginning of the Meeting on Friday afternoon followed, in the evening, by a cocktail party, buffet dinner, and dance.

Saturday morning features table clinics and projected clinics.

The featured speaker for the meeting is Carroll G. Bennett, D.D.S., M.S., whose topic will be Prevention. Dr. Bennett is Professor and Chairman of the Department of Pedodontics and Assistant Dean at the University of West Virginia School of Dentistry. He is Supreme Editor of Omicron Kappa Upsilon, and a Director of the American Board of Pedodontics.

Saturday evening will feature the annual business session with President D. F. Hord presiding.

Sunday morning Dr. Bennett will continue with his presentation on the practical approaches to Prevention.



# second district news

James D. Blankenbeckler, D.D.S., Editor

## Second District Presents Fall Meeting



Dr. James Clark



Dr. Paul Jacobi

The Second District Dental Society is pleased to announce that the Ninth Annual Tar Heel Dental Seminar will be held at the new Downtowner East in Charlotte, North Carolina. The dates for the Second District Meeting will be September 8, 9, and 10. Saturday afternoon will feature clinics and projected clinics followed by a business session. A social hour and banquet will follow in the evening.

The featured speaker on Sunday will be Dr. James W. Clark. Dr. Clark will speak on "Current Dietary Influences." Dr. Clark is a diplomate of the American Board of Periodontology and he is Professor and Chairman of the Department of Periodontics at the University of Tennessee.

The featured speaker for Monday is Dr. Paul Jacobi from Neenah, Wisconsin. His presentation will be on "The Successful Dental Practice." He will present a sound approach to building, managing and maintaining a successful dental practice.

The program, both social and scientific is specifically designed for the entire dental family. You may learn and have a good time at the entire meeting. A cordial welcome is extended to all North Carolina dentists and their staff to attend the Tar Heel Dental Seminar.

### PROGRAM—SECOND DISTRICT

#### Saturday September 8

12:00- 5:00	Registration and Ticket Sales
1:00- 4:45	Commercial Exhibits—2nd Floor Ballroom
1:00- 2:45	Table Clinics—2nd Floor Ballroom
3:00- 4:45	Projected clinics —2nd Floor Ballroom
4:45- 5:15	Business Session
6:30- 7:30	Social Hour. Marco Polo Room—2nd Floor
7:30	Banquet
9:00-12:00	Dancing

#### Sunday September 9

9:00	Executive Committee Breakfast—Marco Polo Room
11:00- 5:00	Registration and Ticket Sales
12:00- 1:30	Business Luncheon. Marco Polo Room—2nd Floor
1:30- 4:30	Commercial Exhibits—2nd Floor Ballroom
2:00- 4:30	Dr. James W. Clark—"Current Dietary Influences"—2nd Floor Ballroom
6:30- 7:30	Social Hour. Marco Polo Room—2nd Floor
7:30	Buffet Dinner
8:45-10:45	Monte Carlo Casino and Auction

#### Monday September 10

8:30- 9:30	Registration
9:00- 4:30	Commercial Exhibits—2nd Floor Ballroom
9:00-12:00	Dr. H. Paul Jacobi—"Successful Dental Practice"
12:00- 1:30	Luncheon (on your own)
1:30- 4:30	Dr. Jacobi
4:30	Adjournment: Exhibitor Prize Drawing Door Prize Drawing



# third district news

John D. Hamrick, D.D.S., Editor

## Third District Plans Fall Meeting



Dr. Joseph Sugg



Dr. Thomas Shipmon

A warm welcome awaits everyone to attend the 53rd Annual Meeting of the Third District Dental Society to be held at the Holiday Inn Four Seasons in Greensboro, North Carolina.

Registration begins Saturday afternoon October the 6th, followed by a social hour, buffet dinner and dancing to a popular orchestra.

"Mini clinics" will be presented by the faculty of the University of North Carolina School of Dentistry beginning at 10 o'clock on Sunday morning. A social hour and banquet followed by lively entertainment completes Sunday's activities.

The program committee is very fortunate to have obtained Dr. Tom Shipmon a private practitioner of Prosthodontics and professor of full denture prosthesis at the University of Tennessee School of Dentistry. Dr. Shipmon has presented clinics in prosthetic dentistry to over 100 dental societies in the United States and Canada. His subject will be entitled "A Practical Approach to Complete Denture Prosthesis." Dr. Shipmon presents his material in a practical and entertaining manner.

### PROGRAM—THIRD DISTRICT

#### Saturday Afternoon October 6

Registration

#### Saturday Evening

Social Hour, Dinner, and Dancing

#### Sunday Morning October 7

10:00-1:00 "Mini Clinics"

11:00 New Member Orientation

#### Sunday Afternoon

2:00-5:00 Dr. Thomas H. Shipmon "Helpful Hints in Prosthetic Dentistry"

#### Sunday Evening

Social Hour, Banquet, and Entertainment

#### Monday Morning

Dr. Thomas H. Shipmon "A Practical Approach to Denture Construction"

#### Monday Afternoon

Dr. Thomas H. Shipmon, continued



# fourth district news

Richard S. Hunter, D.D.S., Editor

## Fourth District Prepares Fall Program



Dr. Jerome Mittleman



Dr. Beverly Mittleman



Dr. Fred Hasty, President 4th District

The Fourth District Dental Society will hold its Fall Meeting at the Downtowner Inn in Fayetteville, North Carolina on October 11, 12 and 13. The featured clinicians are Dr. and Mrs. Jerome S. Mittleman, who will speak on "Getting Prevention Through to Your Patients." This husband and wife team will speak on (1) What is the problem? Why is prevention failing in some offices? (2) Psychology of helping people find out the uncomfortable truth about their mouths. (3) Step by step how we introduce patients to our preventive practice. (4) Control therapist goes off alone with the patient—What does she say? What does she do? (5) Temporal Mandibular joint and occlusion (6) Nutrition, how we explain it to patients so they will do something about it.

The Fourth District will feature entertainment, with a social hour and dinner after the first general session on Friday evening and on Saturday evening a cocktail hour and banquet will be held. Very special entertainment has been arranged for the banquet and you will not want to miss this.

The program has been carefully planned in order that Sunday will be free for relaxation and returning home.

### PROGRAM—FOURTH DISTRICT

#### Thursday October 11

- 5:00- 8:00 Registration  
8:30- 9:30 Executive Committee Meeting

#### Friday October 12

- 8:00- 9:00 Registration  
9:00-12:00 Dr. and Mrs. Jerome S. Mittleman  
12:30 Luncheon  
2:00 Dr. and Mrs. Jerome S. Mittleman  
4:30 Commercial Exhibits  
5:30 First General Session  
7:00 Social Hour  
8:00 Dinner

#### Saturday October 13

- 7:30- 9:00 Open Forum Breakfast  
8:00- 9:00 Registration  
9:00-10:30 Table Clinics and Commercial Exhibits  
10:30 Second General Session  
1:00- 5:00 Golf Tournament  
6:30- 7:30 Cocktail Hour  
7:30- 9:00 Banquet  
9:00-12:00 Entertainment



# fifth district news

Wayne C. Anderson, D.D.S., Editor

## Fifth District Previews Fall Program



Dr. William Gilmore

With the beginning of Indian Summer and a chance of frost on the pumpkin in the West, why not come East and join the Fifth District for an educational program of sun and fun. The Fifth District meeting will be held September 13, 14 and 15 at the Timme Plaza overlooking the majestic Cape Fear River. Dr. William Gilmore, Professor of Operative Dentistry at the University of Indiana will be the featured speaker on "Current Concepts in Restorative Dentistry." The presentation will cover subjects which are important to the general practitioner. Emphasis will be placed on practical applications of research to improve dental health care. Preventive and mechanical concepts will be discussed and illustrated.

### PROGRAM—FIFTH DISTRICT

#### Thursday September 13

- |            |  |
|------------|--|
| 4:00       | Executive Committee Meeting—Board Room |
| 6:00- 9:00 | Registration—Main Lobby                |
| 9:00       | General Session—Ball Room              |

#### Friday September 14

- |             |                                  |
|-------------|----------------------------------|
| 7:30- 9:00  | Open Forum Breakfast—Garden Room |
| 8:00-10:00  | Registration—Main Lobby          |
| 9:00-11:30  | Dr. Gilmore—Ball Room C          |
| 12:00- 1:00 | Luncheon—Ball Room A             |
| 1:30- 4:30  | Dr. Gilmore                      |
| 6:00- 7:00  | Social Hour—Patio                |
| 7:00- 9:00  | Luau—Patio                       |
| 10:00- 1:00 | Dance                            |

#### Saturday September 15

- |             |                                  |
|-------------|----------------------------------|
| 8:30        | New Members Breakfast—Board Room |
| 9:30-11:00  | Projected Table Clinics          |
| 11:00-12:00 | Final Business Session           |
| 12:00       | Executive Committee Meeting      |

# Multiple Cancers of the Oral Cavity\*

E. Jeff Burkes, Jr., D.D.S., M.S.†

BILLROTH\* in 1879 was among the first to report the occurrence of multiple malignant tumors in his patients. Since that time, it has become widely recognized that a patient who has one malignancy has a greater than average chance of having a second one in an adjacent or separate area.<sup>3, 5, 7</sup> Not uncommonly, the oral cavity has been the site of one of these malignancies. The obvious importance of this phenomenon to the dentist and the patients he sees should be considered during history taking and oral examination. Two patients have recently been seen at the Oral Cancer Detection Center, University of North Carolina School of Dentistry (OCDC) who were determined to have three separate cancers occurring simultaneously in the oral cavity.

## CASE REPORTS

### Case 1

An 84-year-old female complained of a growth in her left cheek which she said "comes and goes." Because of the soreness in that area, she had consulted her physician six months previously. At that time, she was told that the lesion in the cheek was the result of irritation by her teeth and he advised removal of the teeth on that side. Because of her reluctance to undergo extractions, she delayed going to her dentist for several months. When she was examined by her local dentist, the mass in the cheek had grown to approximately 5 cm. in diameter. She was then referred to the OCDC for evaluation and biopsy.

Examination revealed enlarged left submandibular lymph nodes which were firm, but not fixed to the underlying tissue. An indurated 5cm. ovoid, submucosal nodule was present in the left buccal mucosa (Fig. 1). This lesion and a nodule approximately 1x1 cm. immediately posterior to the larger nodule were observed plus diffuse clin-

ical leukoplakia throughout the mandibular labial vestibule. In the anterior floor of the mouth, there was a firm elevated erythematous lesion overlying the sublingual gland area, and extending across the lingual frenulum (Fig. 2). The gingiva around the mandibular anterior teeth showed erythema immediately surrounding the teeth with diffuse and well delineated clinical leukoplakia in the attached gingiva (Fig. 3). The remaining oral mucosa was

slightly white but within normal limits for texture and form.

Physical examination before treatment revealed a moderately obese white female in no acute distress. No additional significant physical abnormalities were noted except hypertension. No other cancer was seen or suspected in other parts of the body. Review of systems indicated a long standing history of high blood pressure and a history of intestinal obstruction two years earlier.

The patient had used snuff in her left vestibule for many years. Since the left buccal mucosa had been sore, she was placing the snuff in her right mandibular vestibule. She denied the use of alcoholic beverages.

Biopsies were originally performed on the lesions in the buccal mucosa and floor of the mouth. During preparation for radiation therapy, the remaining teeth were removed and specimens of the gingiva submitted.

The lesion in the buccal mucosa was surfaced by parakeratotic stratified squamous epithelium with extensive branching and fusing of the rete ridges. Toward one margin of the specimen, the rete ridge pattern became highly irregular with large nests of neoplastic epithelial cells dropping away from the surface epithelium. The nests were of varying size, and contained hyperchromatic, pleomorphic epithelial cells, many of which were undergoing keratinization. The center of the majority of these nests was occupied by keratin pearls. In the floor of the mouth, the biopsy specimen revealed a thin epithelial surface with an irregular maturation pattern. Nests of neoplastic epithelial cells were present in the submucosa. These nest were surrounded by fibrous connective tissue infiltrated with chronic inflammatory cells (Fig. 4). Vascularity in this submucosa was prominent. Specimens submitted from the gingival tissue all showed focal hyperkeratosis. In one area adjacent to the mandibular left anterior teeth, the



Fig. 2



\* Supported by National Cancer Institute Grant No. T12-CA08136.

† Assistant Professor of Oral Pathology, Univ. of North Carolina School of Dentistry.

## MULTIPLE CANCERS

specimens were surfaced by thinned epithelium in which there was loss of orientation of the basilar cells, hyperchromatism, and increased mitotic activity. Appearing to drop away from this epithelium were irregular islands which contained large columnar appearing cells with a basilar orientation (Fig. 5). The microscopic diagnosis of the tissue in each of these areas was well differentiated squamous carcinoma.

Treatment for this patient consisted of external radiation and implantation

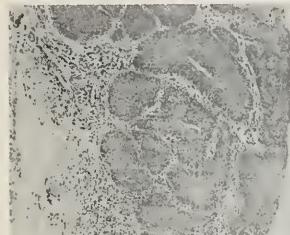


Fig. 4

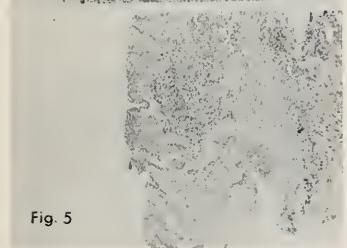


Fig. 5

of radioactive sources in the tumors. She is currently two years post-therapy without evidence of recurrent or additional cancer.

### Case 2

A 58-year-old male who reported being well until approximately six weeks prior to examination at the OCDC. At that time, he noticed some bleeding and swelling in the left side of his mouth. At first, he thought he had accidentally bitten his left cheek. Because of the continued pain and swelling, antibiotics were prescribed by a physician for two weeks without improvement. In the next two weeks, the swelling became firmer and more noticeable externally. During this time, he was unable to wear his maxillary denture.

Past history revealed that the patient had worn maxillary and mandibular dentures for approximately four years.

Prior to that time, dental care was periodic, with no complications being reported from dental treatment. Further history revealed heavy alcohol consumption up until 10 years ago, however, because of medical complications his alcohol intake has been restricted for the past few years. He reported smoking cigars "like cigarettes." Hospitalizations in the past had been for malaria in 1929, pneumonia in 1938, and severe anemia in 1961.

The patient was a very alert cooperative male with an enlargement of the left side of his face. Examination of the neck revealed no abnormal masses, however, lymph nodes were palpable bilaterally. There was a diffuse swelling in the left zygomatic arch and cheek area, covered by normally colored skin. A firm nonmoveable mass approximately 3x3 cm. was palpated beneath the zygomatic arch, anterior to the temporomandibular joint area. Intraorally the alveolar ridges of the maxillary and mandibular arches were rough with bony protuberances and were surfaced in some areas by hyperkeratotic patches. There was a 2x1 cm. linear erythematous patch in the area of the left sublingual salivary gland (Fig. 6). Palpation revealed that this area was slightly firm and raised. In the buccal mucosa the mass was posterior to Stenson's duct from which no saliva flow could be elicited. The mucosa over this mass was ulcerated,

and filled with necrotic debris (Fig. 7). Soreness and pain were minimal except during deep palpation. Examination of the oral pharynx revealed an erythematous granular patch approximately 1 cm. in diameter at the junction of the anterior tonsillar pillar and the base of the tongue.

Physical examination and review of systems revealed no additional significant findings. Specifically, there was no evidence of cancer in any other part of the body.

Microscopically, the lesion in the buccal mucosa was surfaced by parakeratotic stratified squamous epithelium. The submucosa contained a salivary gland duct which was lined by stratified columnar epithelium and metaplastic squamous epithelium. Mitotic activity was excessive and there was great variation in size of the epithelial cell nuclei in this duct. A large portion of the connective tissue was infiltrated with islands and strands of anaplastic hyperchromatic cells in an organoid pattern (Fig. 8). Dyskeratotic cells were observed in some of the nests, however, the majority of the cells were vacuolated. The cytoplasm in these cells was PAS and mucicarmine positive. There was a desmoplastic response surrounding these nest of neoplastic epithelial cells. In the floor of the mouth, the specimen was surfaced by parakeratotic stratified squamous epithelium with bulbous rete ridges. The orientation of the basilar cells was lost and mitotic activity greatly increased (Fig. 9). Disruption of the



Fig. 6

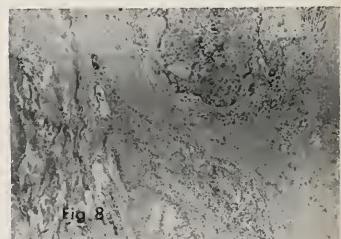


Fig. 8

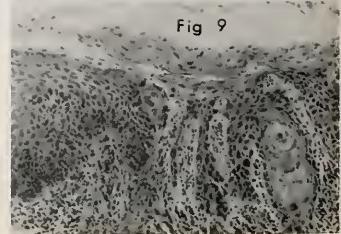


Fig. 9

## MULTIPLE CANCERS

muration pattern was present throughout this epithelium and in one area there was loss of basement membrane. Small islands of neoplastic epithelium had invaded the submucosal tissue. The lesion biopsied in the tonsilar area showed similar atypical surface changes with islands of neoplastic squamous cells exhibiting dyskeratosis, hyperchromatism, and pleomorphism in the submucosa. Diagnosis of the lesion in the buccal mucosa was mucoepidermoid carcinoma. The lesions from the floor of the mouth and tonsilar area were interpreted as early invasive squamous cell carcinoma.

After radiation therapy there was no evidence of tumor in the floor of the mouth or the tonsilar pillar, however, the mass in the cheek had not regressed. The patient subsequently underwent a left hemimaxillectomy and removal of the eye. Three years after radiation therapy and surgery a small recurrent tumor was seen and removed from the superior margin of the operative defect. No additional changes in the oral mucosa have been noted.

## DISCUSSION

Several authors have established criteria for the evaluation of multiple cancers.<sup>9, 10</sup> The two cases reported here satisfy these criteria since there is no evidence to suggest that any of these tumors were metastatic lesions. Likewise, because of the anatomic distribution, it is unlikely that "kissing tumor" type spread occurred. Except for the muco-epidermoid carcinoma in Case 2, the lesions were rather superficial and separated by clinically normal epithelium.

The incidence of multiple cancers varies with each series reported. Warren and Gates<sup>9</sup> found a 3.7 percent multiple incidence in their study, while Berg, et al.,<sup>1</sup> found that respiratory and upper digestive cancers occurred six times as often as expected in patients with oral cancer. In their study, tongue cancer patients developed excess cancers more often than did other mouth cancer patients with excessive numbers of laryngeal and lung cancers following floor of the mouth cancers. Horowitz and Chomet<sup>4</sup> recorded an incidence of 17.3 percent. Moertel and Foss<sup>7</sup> found an incidence of 16.4 percent for multicentric cancers and 8.7 percent multiple oral cancers.

Horowitz and Chomet<sup>4</sup> use the word multicentric when referring to carcinoma arising in a single organ such as the oral cavity, since it has been shown that dysplastic changes can be found in tissue surrounding the clinically observed cancer. In the patients presented here, certainly this could be true, however, since the intervening mucous membrane appeared clinically normal, and biopsies had margins free of dysplastic changes, the lesions were considered to be multiple primaries.

The use of tobacco by both patients and the use of alcohol at one time by one patient may be of etiological significance. Snuff has been frequently implicated and the combination of alcohol and tobacco has been widely recognized as being associated with a high incidence of oral cancer.<sup>1, 2, 11</sup> In these patients, although the mucosa between each of the primaries was clinically normal submicroscopic and biochemical changes could have been present indicating "field cancerization." It thus becomes the responsibility of the dentist to initiate appropriate preventative measures to eliminate all sources of carcinogenic irritation to the oral cavity.

In neither of these patients was cancer detected in any other part of the body. However, because of their proven potential to support malignant disease, they are carefully evaluated at frequent intervals. It is the responsibility of the dentist not only to examine patients thoroughly for cancer, but to be aware of past medical and dental history. If a positive history for cancer previously is given by a patient, regular oral examination and frequent follow-up should be provided for early detection and prevention of oral cancer. As with any neoplasm, prognosis is improved by early detection and treatment. Shedd<sup>8</sup> cites an improvement in the five - year survival rate from 11 percent to 36 percent with tongue cancer and 20 percent to 50 percent for floor of the mouth cancer when the disease is discovered in the localized stages.

## SUMMARY

Two patients, each having three separate carcinomas occurring simultaneously in the oral cavity, have been presented. These cases illustrate that a high degree of suspicion coupled with prompt diagnostic tests will result in more comprehensive treatment and an improved prognosis. Because of the

significant number of patients who have cancer in more than one area, any abnormality in a patient with a history of cancer should be diagnosed promptly. Because of the knowledge of the relation between cancer and tobacco and alcohol usage, it is also the responsibility of the dentist to initiate preventive measures to eliminate possible sources to carcinogenic stimulation to the oral cavity.

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# Replantation of Avulsed Teeth

Maurice B. Richardson, D.D.S.

THE avulsed tooth presents a problem to the dentist. No definitive and totally successful procedure has been developed for treatment of this occasional accident. These patients have been treated with various procedures with degrees of failure and success. It is most important, however, to maintain a philosophy towards retention of injured teeth for as long a period of time as possible.

Replantation here is defined as the replacement of a tooth into its original site after having been lost by accidental avulsion.

A review of the literature<sup>1-6</sup> reveals that: (1) replanted teeth in the pre-teenage group resorb more rapidly than those in the teenage group and (2) the majority of patients reported fall in the pre-teenage group. It is generally accepted that the longer an avulsed tooth is allowed to remain dry before replantation the less favorable the prognosis.<sup>7</sup> Ohman's<sup>8</sup> study supports the hypothesis that replanted teeth with open apices have a better prognosis. The studies of Fleming<sup>9</sup> and of Rabinowitch<sup>10</sup> on retaining or removing the pulp of replanted teeth have led to contradictory conclusions.

The following is a report on five patients who presented with avulsed permanent incisors:

The first patient was a seven year old female engaged in a sofa pillow fight with her brother wherein the pillow caught and avulsed her mandibular left central incisor. She was examined thirty minutes later by the author. The pulp was immediately removed from the tooth, and the canal was prepared and sealed with a silver point and root canal cement. The alveolus was carefully curried. The exterior of the tooth was cleansed with a germicidal soap and replanted. Both central incisors were splinted by means of welded stainless steel bands. The splint was allowed to remain in place for five weeks. When

the splint was removed the tooth was found to be immobile and functional. This tooth remained functional for a period of approximately six years before it was lost due to root resorption. Fig. 1.

A female in her eleventh year of age was in a bicycle accident in October, 1970. She was seen one hour and thirty minutes later by the author. The maxillary right central, lateral, and left central incisors were avulsed. The right maxillary canine was severely displaced. The avulsed teeth were cleansed with a germicidal soap (hexachlorophene); the alveoli were curried; and the teeth were replaced. After repositioning the canine, the teeth were splinted by means of ligature wire. The patient was placed on antibiotic and antitetanus therapy. The splint was removed three weeks later, and the teeth were immobile.

Three months later root resorption had begun. Endodontic treatment was initiated, and the canals were sealed using calcium hydroxide with camphorated p-chlorophenol in an attempt to arrest or retard the resorative process. The canals were reopened, cleansed, and resealed with the same material eight months later.

After an additional nine months the maxillary central incisor canals were again reopened, cleansed, and sealed

with gutta percha points. The maxillary lateral incisor was deteriorating rapidly from external resorption, and no attempt was made towards further treatment.

A nine year old male was tussling with his brother in December, 1970, and the maxillary left central incisor was avulsed. Treatment was initiated within one hour. The incisor was cleansed with germicidal soap (hexachlorophene), the alveolus curried, and the tooth replanted. Splinting was accomplished by using self-curing acrylic. The splint was lost two weeks later. The central incisor was immobile; therefore, a new splint was not placed. Five months later endodontic therapy was performed and the canal was sealed with calcium hydroxide and camphorated p-chlorophenol. The patient was examined after an additional three months, at which time the patient moved from the area and was not available for further recall.

A seventeen year old male was involved in a tooth to head accident at a softball game in April, 1972. He was first seen in the local hospital emergency room where the four maxillary incisors were placed in sterile saline solution. He was then brought to the dental office. Examination revealed the four maxillary incisors to be avulsed, the maxillary canines severely dis-



placed, the labial plate of bone displaced and fragmented. The avulsed teeth were opened, the pulps extirpated, and a pellet of cotton saturated with metacresylacetate was sealed in each of the pulp chambers. The teeth were gently cleansed with a germicidal soap (hexachlorophene) and replaced in the alveoli, the canines were repositioned, the labial bone repositioned, and the soft tissue flap sutured to place. The teeth were stabilized by means of a self-curing acrylic splint. The patient was placed on antibiotic therapy. The sutures were removed five days later, and the splint removed two weeks later. The teeth were found to be immobile.

Endodontic therapy was initiated, and the incisors were sealed with gutta-percha points after four months. The canines did not respond to pulp testing but were asymptomatic and tooth color was normal. Nine months following the accident porcelain and gold jacket crowns were placed on the central incisors, and the lateral incisors were contoured by reshaping the incisal surfaces. The canines were asymptomatic at this time.

A twenty-three year old female was involved in an automobile light pole collision in July, 1972. She was seen first in the local hospital room and then brought to the dental office. Examination revealed several teeth fractured, severe lacerations to the lips and gingival tissue, and displacement of maxillary incisors and canines. The maxillary right lateral incisor was avulsed, and the labial bone fragmented and displaced. She did not have the lateral incisor in her possession, so her companions were given a container of sterile saline solution and instructed to search for the tooth. They recovered the tooth after it had been avulsed for a period of about three hours time. The pulp chamber was opened, the pulp extirpated, and a pellet saturated with cresatin was sealed in the chamber. The tooth was cleansed with a germicidal soap (hexachlorophene) and replaced in the socket. The labial bone was repositioned, the teeth repositioned, and tissue sutured to place. The maxillary anterior teeth were splinted by means of .010 ligature wire. The sutures were removed five days later, and the splint was removed three weeks later. All teeth were immobile. Endodontic therapy was completed on all of the accidentally involved teeth including the previously avulsed lateral incisor three months following the accident.

## DISCUSSION

Traumatic injury to the incisor teeth is a common accident of childhood. Fortunately, the number of teeth which suffer complete luxation form only a small sampling of the total number of teeth injured. Many different methods of treatment have been recommended in the literature, but the prognosis of avulsed teeth continues to be unpredictable.

In general: (1) It is important to make certain that both the parent and child understand that the replanted tooth, or teeth, has an unpredictable prognosis; (2) The tooth must be replaced in the alveolus as soon as possible following avulsion, if any degree of success is to be expected. (3) The apexification procedure for obtaining root end closure of immature roots is an effective procedure. In cases of external resorption, it is believed to be beneficial in retarding the resorption process. (4) Endodontic treatment is preferably accomplished after the tooth has been replanted in the alveolus; (5) the patient should be given antibiotics and anti-tetanus therapy in most instances; and (6) avulsed teeth should be stabilized by splinting by any of the various methods described. If the labial bone is intact .010 ligature wire is suggested for adequate stabilization. If the labial bone has been fractured a labial-lingual acrylic splint is suggested. The acrylic is contoured to permit adequate closure.

## CONCLUSION

Regardless of the poor prognosis and unpredictability, replantation should be attempted unless the patient is not enthusiastic towards the procedure. In most instances, it is psychologically important for children to retain these teeth even for a brief period of time. Should treatment be unsuccessful, they will have had a longer period of time to mentally adjust to the loss and replacement of the tooth. It has been the author's experience that both the patient and parent have been most appreciative of any effort to "save the tooth."

The last four of the five patients presented in this report were not recalled after a sufficient period of time to record adequate data. All of these were treated within the last three years and long time recall is impossible as of this writing.

This report is intended to present methods used in the author's practice

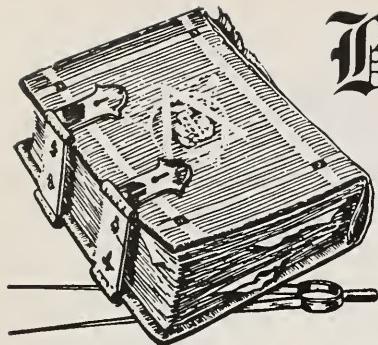
for treating avulsed teeth and current concepts of this practice in his office, as it relates to reports in the literature.

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# Book Reviews

**Minor Tooth Movement in Children.** Joseph M. Sim. 329 pages, 528 illustrations. \$26.50. The C. V. Mosby Company, St. Louis, Missouri. First edition, 1972.

In this first edition book the author attempts to shed some light on a difficult area of orthodontic diagnosis and treatment in the primary and mixed dentition. The book is divided into three basic parts: the first of which deals with theory and diagnosis. In part one minor tooth movement is defined and emphasis is placed on the need for correct diagnosis as the basis for successful treatment. Subject areas basic to correct diagnosis such as normal and ectopic eruption patterns of teeth, classification of malocclusion, and the proper method for obtaining diagnostic records are dealt with in detail. The author introduces the "diagnostic quadrangle" as an aid to organizing the elements of diagnostic information and describes the use of three individual methods of mixed dentition arch length analysis. Part I concludes with the description of some of the more commonly used minor tooth movement appliances which are well illustrated and also describes the tissue response to natural and biomechanical forces. This first part of the book successfully provides a sound and basic introduction to the general area of minor tooth movement in children.

Part II "Selection and Treatment of Minor Malocclusions" further elaborates some of the basic diagnostic principles discussed in the previous section and describes the application of these principles to clinical problems. In particular, the need to preserve arch form, the treatment of lower anterior crowding, and the correction of anterior and posterior cross-bites are discussed. Again, in this part of the book, the appliances and principles being discussed are well illustrated.

The last part of this book deals with the detailed laboratory fabrication of such appliances as fixed and removable space maintainers, acrylic inclined planes, modified Hawley appliances and removable lingual arches. A detailed description including manufacturer and individual identification number of the instruments and materials used in the fabrication of minor tooth movement appliances is provided in Part III.

Overall, this book is a worthwhile addition to the library of the dentist or student seeking to obtain a basic understanding of the general area of minor tooth movement in children. It is a well illustrated book dealing with a subject area that many dentists have traditionally found difficult to understand and master.

JOHN S. CASKO

**Edgewise Orthodontics.** Raymond C. Thurow. 336 pages, 351 illustrations. \$29.00. The C. V. Mosby Company, St. Louis, Missouri. Third edition, 1972.

In this, the third edition of his book, Dr. Thurow has managed to maintain some of the excellent material offered in the two previous editions as well as making some very worthwhile additions in the area of clinical practice. The first two parts of this book deal primarily with basic engineering principles as they relate to orthodontics and the biological basis of tooth movement. This book provides the reader with a detailed understanding of the application of bio-mechanical principles as they apply to different areas of orthodontics ranging from the properties of the basic materials used to the design of specific force systems. Detailed description of the manufacture of specific materials, their composition and the effects of heat treatment and annealing is presented. The biologic aspect of tooth movement is well covered with emphasis on such areas as histologic aspects of tooth movement and tissue adaptation to functional orthodontic stresses.

The greatest change in the third edition of this book is in the area of clinical procedures where the author covers a large number of areas ranging from a detailed description of the basic edgewise appliance, to the overall coordination of treatment procedures. In this section on clinical procedures, the author successfully combines the use of sound, basic orthodontic principles with some of the newer edgewise treatment mechanisms. A chapter on retention concludes the clinical procedures section and discusses progressive band removal, the selection of a specific retention appliance, and the evaluation of post-treatment changes.

In summary, the third edition of Dr. Thurow's Edgewise Orthodontics is an excellent book for the orthodontic specialist who is seeking to gain an understanding of or review the basic principles related to the edgewise mechanism. The discussion of basic bio-mechanical principles as they related to orthodontic materials and force systems, is perhaps the outstanding feature of this book.

JOHN S. CASKO

**Oral Microbiology.** William A. Nolte, Houston, Texas, Second Edition, The C. V. Mosby Company, 1973.

This is an excellent text for the student and dental practitioner. The text, in its second edition, is well-written and is organized in three major sections with easy reference to specific areas of oral microbiology.

## BOOK REVIEWS

Section One. "The Oral Microfloral and the Host," consists of two chapters which give an introduction to microbiology with emphasis on the oral cavity.

Section Two. "Oral Lesions Incited by Microorganisms," consists of ten chapters giving special attention to microorganisms found in the oral cavity with each organism discussed in relation to its general characteristics, epidemiology, diagnosis and treatment of diseases caused by these microorganisms. Also, in this section are chapters relating the role of microorganisms in areas such as dental caries, periodontal disease, and infections of the pulp and periapical tissues.

Section Three. "Control of Microorganisms," contains three chapters that deal with sterilization and disinfection, chemotherapy, and the use of laboratory animals with relation to their contribution to oral microbiology.

—WILLIAM PALMER

**Textbook of Practical Oral Surgery**, Daniel E. Waite, Philadelphia, 1972; 567 pages with illustrations, index. \$19.50, Lea and Febiger.

The tone of this textbook is set in the opening paragraph of the preface. Dr. Waite states, "This textbook is directed to the dental student so that he may become proficient in the fundamentals of the art and sciences of oral surgery." Each page consists of only one written column; the remainder of the page being utilized for diagrams and/or photographs. This leaves adequate margins for note taking within the book.

The contents of this textbook encompasses the scope of oral surgery adequately, and it places its emphasis on the oral surgery procedures which can be performed in the practice of general dentistry. All chapters are extremely well complemented with pictures and diagrams of the various procedures. The chapter on the maxillary sinus is very well done. Dr. Waite discusses the techniques utilized to distinguish between dental disease and sinus pathology when pain is present in the posterior maxillary teeth. He presents in chapter 14 a cogent discussion, complete with illustrations, of acute and chronic sinus exposure and their treatment.

The most outstanding chapter of this text deals with tracheostomies. It is surprising that airway distress does not occur more often in dental offices, considering the amount of materials and instruments utilized in the oral cavity.

As in all first edition textbooks, there are weaknesses which need correction. This text is no exception. Chapter 24, Hemorrhage and Shock, devotes over half of the discussion to coagulation defects and less than a fifth of the discussion to treatment of post-operative hemorrhage. It is without the usually fine diagrams demonstrated in the majority of texts. Inflammation, repair and infection are three very difficult subjects both to discuss and to understand. Dr. Waite has tried in this chapter to present these subjects in an understandable form, but in the process he has minimized some of the important details.

This text is very attractive to the dental student because of its readability and its outstanding diagrams, and it should be considered for use in undergraduate training programs. For the general practitioner in need of a basic oral surgery textbook, this would be a fine addition to his library but should be supplemented with a more detailed oral surgery manual.

DORAN E. RYAN

**Applied Psychology in Dentistry**. Cinotti, W. R., Grieder, A. and Springob, H. K. 274 pages, \$15.00. The C. V. Mosby Company, St. Louis. 2nd edition, 1972.

In approaching the formidable task of preparing a second edition relating or applying psychology to various aspects of dentistry, the first two authors (both prosthodontists) recruited the efforts of a third author—a psychologist. The book is divided into three sections. Part I, which resembles a condensed version of an introductory psychology text, has been usefully expanded beyond the Freudian—psychoanalytic emphasis of the first edition. Other material in this section of possible interest to the dentist includes a description of the specialties of which psychology is made up, and suggestions as to at what point and to whom the dentist should turn when confronted with a "disturbed" patient. Part II on applications of psychology to the dentist's management of himself, and his patients, office and personnel remains mostly intact from the first edition. What material was retained is basically sound; however some seemingly important content on effective communication with and persuasion of others was deleted. Part III is new to this edition and is made up of chapter contributions by outside authors who attempt to relate psychology to the dental specialties. The quality of the material ranges from the bulk of the chapters which appear to be well done, to a couple of chapters which are poorly written and organized respectively.

In summary, this book represents a much needed contribution to an aspect of dentistry which is taking on ever-increasing importance, i.e. the role of applied psychology as it affects the dentist's personal awareness and development, and his relationship to his practice, patients and personnel. Being a rare attempt at integrating psychology with various aspects of dentistry, the majority of the book represents not only useful subject matter for dentists and concerned behavioral scientists alike, but serves to outline and highlight some of the important psychological aspects of dentistry to which further thinking, research and application might be directed.

DENNIS C. STACEY

**The Art & Science of Operative Dentistry**. Editors: Sturdevant, C. M.; Barton, R. E.; Brauer, J. C. 529 pages, Illustrated. \$19.50. McGraw-Hill Book Co. 1968.

One would be hard pressed to find any serious inherent deficiencies in the *Art & Science of Operative Dentistry*. This comprehensive text is a well organized and superbly illustrated commentary on contemporary Operative Dentistry. Although it provides an excellent reference source for experienced clinicians, the manual is designed for use as a classroom text. In fact, one of its more salient features is its oblong shape which facilitates use of the laboratory chair.

The work is divided into eighteen chapters. Beginning with a fundamental approach, the first four chapters are devoted to an introduction; a foundation of anatomy, physiology, and histology; the etiology of dental disease; and the considerations of diagnosis and treatment planning. The succeeding pages are primarily concerned with the spectrum of operative preparations and restorations. Additional space has been allocated to the role of the dental assistant and the final chapter deals with endodontics as it supplements Operative Dentistry.

(Continued on page 31)



*Old Sweetheart in Action*



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Zeno on Dental Health

# Preliminary for Pinehurst 1974

Dr. Baxter B. Sapp, Program Chairman, for the 1974 Annual Session is pleased to announce an outstanding program for the North Carolina Dental Society next May 12-15.

## IMPLANTS FOR THE GENERAL PRACTITIONER— DON'T AND DO'S

Dr. Braly is a graduate of Emory University School of Dentistry. Dr. Braly is a member of the Southern Academy of Oral Surgery, Southern Academy of Periodontology, American Academy of Periodontology, American Academy of Dental Practice Administration, and the American Academy of Implant Dentistry.

He was National President, Emory Dental Alumni Association, and National President, Emory Alumni Association.

He is a Fellow of the American College of Dentists and Fellow of the International College of Dentists and Director.



Dr. Thomas E. Braly

This presentation will include the history of implantology, both European and U. S., types of implants, the technique of inserting baldie implants, as well as why they failed. The reasons for implant design and pontic design will be of interest. Histology of the tissue adjacent to implants will be discussed. The all-important epithelial cuff around the implant neck will be discussed at length throughout the presentation.

The most important, but often forgotten, aspect of im-

plantology, the periodontal prevention and plaque removal aspects, will be presented. Time will be allotted to speak to the point of what is the status of implants in 1974, as well as the future of implants and what is being done in implant research.

## CROWN AND SLEEVE-COPING RETAINERS IN PARTIAL PROSTHESIS

Dr. Dietz is a graduate of Baltimore College of Dental Surgery.

Dr. Dietz is a staff member in the Departments of Continuing Education, University of Maryland, School of Dentistry, University of Pennsylvania, School of Dental Medicine, New Jersey College of Medicine and Dentistry, and Tufts University, School of Dental Medicine. He is also a Clinical Associate, University of Pennsylvania, School of Dental Medicine, Department of Restorative Dentistry and a Lecturer, Graduate Periodontics and Periodontal Prosthetics at the University of Pennsylvania, School of Dental Medicine.

Dr. Yalisove is a graduate of Temple Dental School. He is an Assistant Professor in the Department of Restorative Dentistry at the University of Pennsylvania, School of Dental Medicine. He is a Fellow of the International College of Dentists and a Fellow of the Greater New York Academy of Prosthodontics. He has been a lecturer and clinician for the past twenty-five years.



Dr. Irving Yalisove



Dr. Joseph Dietz

Sophisticated periodontal surgical procedures are now salvaging teeth which were condemned to extraction several years ago. It is the responsibility of the restorative dentist to utilize these salvaged teeth so that they are maintained in a state of good periodontal health. The crown and sleeve-coping technique furnishes several combinations in the selection of a periodontal prosthesis for patients with complicated restorative problems as well as the more routine clinical applications.

## VARIABLES INFLUENCING SUCCESS IN ENDODONTICS



J. B. Freedland, D.D.S., Diplomate American Board of Endodontics, Visiting Professor of Endodontics, University of North Carolina

To achieve predictable success in other than routine endodontic cases, it is essential to understand the diagnostic and therapeutic requirements in those cases that present combined endo-perio lesions, resorptions (internal and external), avulsions, systemic disease, and large osteolytic lesions. Factors that influence pain, endosseous implants, replantation (intentional), pain, and apexification will be discussed.

# Theme—"New Frontiers in Dentistry"

## THE PATIENT IN FACIAL PAIN



Ernest W. Small, D.D.S., M.S.  
Professor and Chairman, Department of Oral Surgery, University of North Carolina

mechanisms, pathways, manifestations; how to evaluate and measure pain.

**Patient Evaluation,** Cecil R. Lupton, D.D.S., Professor of Oral Surgery. The general practitioner of dentistry's role in the management of the patient in facial pain not just of "dental origin" a) role in diagnosis; b) role in patient evaluation, physical diagnosis, medical history; c) role in treatment; d) role in referral and consultation.

**Neuroanatomy of Facial Pain,** John M. Gregg, D.D.S., M.S., Ph.D., Associate Professor of Oral Surgery. A discussion of pain and its mechanisms, pathways, manifestations; how to evaluate and measure pain.

**Organic Bases of Facial Pain,** Fred A. Bell, D.D.S., M.S., Assistant Professor of Oral Surgery. Specific disease states which are manifested by facial pain and their recognition —a) dental origin; b) sinus origin; c) systemic origin; d) benign and malignant disease.

**Psychogenic Bases of Facial Pain,** Ernest W. Small, D.D.S., M.S. The dentist's role in the diagnosis and treatment of the patient in pain without an organic basis; a discussion of the TMJ pain dysfunction syndrome, recognition of patient types, diagnosis and treatment.

**The Management of the Patient,** Robert L. Campbell, D.D.S., Assistant Professor of Oral Surgery. Pain and acute anxiety state; synopsis of techniques available: oral sedation, I.V. sedation, I.M. sedation, inhalation ( $N_2O/O_2$ ).

**Current Research In Facial Pain,** John M. Gregg, D.D.S., M.S., Ph.D., Associate Professor of Oral Surgery. New drugs, new techniques, acupuncture, the UNC Pain Clinic.

**Summary and Question Period,** Dr. Small and Staff.

## North Carolina Dental Assistants Association



Mrs. Wilma Wilson of Lexington, presided over the twenty-third Annual Session of the North Carolina Dental Assistants Association at the Sheraton Motor Inn, Southern Pines, May 13-15. Linda Heffinger of Eden was program chairman for the meeting.

Speakers for the three day meeting included: Sunday, Bonnie Franklin, President American Dental Assistants Association; Mr. Robert J. Alander; Dr. James A. Harrell, President Elect North Carolina Dental Society; and Miss Judy Millspaugh, North Carolina Hygienist Association. Monday, Dr. Ben E. Fountain, Jr., Raleigh, N. C. spoke on "Dental Education in the Community College System," "What Happens to your Orthodontic Referrals?" was presented by Dr. William G. Davis, Chapel Hill, N. C.; Dr. Kenneth L. Johnson, Raleigh, N. C. spoke on "Introduction to Oral Implantology." Tuesday table clinics were presented by members and student members of our Association.

The Powers and Anderson Cooperation Award was presented to the Cape-Fear Dental Assistants Society. The Dr. James M. Holland Loyal Assistant Award was presented to Gladys Deese. Gladys has been employed by Dr. John Rogers of Charlotte for 26 years. The Dr. William H. Oliver Achievement Award was presented to Wilma Wilson. The Thompson Clinic Award was won by Diane Langevin of Charlotte. Officers installed for 1973-74 were:

President Linda Heffinger, Eden, N. C.; President Elect, Betty Scott, Charlotte, N. C.; Vice-President, Barbara Talbert, Chapel Hill, N. C.; Secretary, Lurlene Medford, Asheville, N. C.; Assistant Secretary, Naomi Lutz, Newton, N. C.; Treasurer, Barbara Hester, Rocky Mount, N. C.

Over three hundred ladies attended the Annual Session.

## BOOK REVIEW

(Continued from page 27)

Each chapter is concise and proceeds through a logical sequence. They are complemented with a liberal quantity of illustrations. The photographs while not in color, are of very acceptable quality. However, the illustrations are perhaps the outstanding feature of the book. They are unrivaled in their clarity and descriptive nature.

In short, this text is a welcome addition to our learning resources.

FOREST R. IRONS

# Items of Interest



Dr. Kermit F. Knudtzon, Professor Emeritus of the School of Dentistry, is Supreme Historian and Editor of DESMOS. DESMOS is the official publication of Delta Sigma Delta Fraternity. Dr. Knudtzon is also a member of the Supreme Council of Delta Sigma Delta.

## ATTENTION!

The UNC School of Dentistry is in critical need of extracted natural teeth for preclinical teaching purposes. Please contact *The Natural Tooth Project, UNC School of Dentistry, Chapel Hill, N. C. 27514*, if you are willing to participate; and we will send you the necessary supplies and instructions.

A two year postgraduate certificate program in Pedodontics is announced by the College of Dental Medicine, Medical University of South Carolina. The program has received preliminary provisional approval by the American Dental Association Council on Dental Education.

The Fifth International Conference on Endodontics will be held September 21-24 at the University of Pennsylvania School of Dentistry.

## DENTISTS AND UNIONIZATION ADOPTED BY THE ADA BOARD OF TRUSTEES

It is the conviction of the Board of Trustees of the American Dental Association after careful consideration, that unions have no appropriate role to play for dentists. Unionization will prove, in the long run, harmful to the legitimate interests of America's dentists and the patients they serve.

## CONSUMER BOOKLET ON DENTISTRY: AMERICAN DENTAL ASSOCIATION COMMENTARY ON THE CONSUMER BOOKLET ON DENTISTRY ISSUED BY PENNSYLVANIA'S INSURANCE COMMISSIONER, HERBER DENENBERG

It is unfortunate that a booklet which is intended to guide the public in the area of dental care should contain so many misleading statements and misstatements.

The booklet states that "There are, for example, six million teeth removed each year that should have been saved through some other treatment, such as root canal work."

No dentist will extract a tooth which can be saved—if he is given the option. Unfortunately many of the insurance programs, particularly those covering the indigent and near indigent, refuse to cover root canal treatment; they will approve an extraction but not the more expensive endodontic treatment which would save the tooth.

Additionally, the profession has strongly emphasized the need for prevention so that the natural teeth can be maintained for a lifetime. The profession has been the strongest supporter of fluoridation of public water supplies, as one example. Unfortunately, many state government officials have either failed to support this measure, or have actively opposed it. If Mr. Denenberg wishes to be truly effective in helping the public to reduce dental disease and dental bills, he should not only express incidental approval of fluoridation, as the booklet does, but he should join with the profession in obtaining immediate approval of a statewide mandatory fluoridation law in Pennsylvania.

There is some sound advice in the booklet but it will be thoroughly obscured by the other confused and misleading information.

## DETERIORATION BETWEEN GOVERNMENT AND HEALTH PROFESSIONS

"After nearly two decades of a reasonably good partnership, the health professions educational system and the federal government appear to be headed toward the rocks," said Reginald H. Sullens of Oklahoma City, president of the American Association of Dental Schools.

"It is incomprehensible that the federal government can even consider withdrawing its support from educational programs producing health manpower," he added, "but apparently all indications point in that direction."

## ITEMS OF INTEREST

### ADA OPPOSES SCHOOL VENDING MACHINES IN SENATE TESTIMONY

The American Dental Association has expressed strong opposition to use of confectionary and soft drink vending machines in schools because of its impact on the oral health of children.

### 1973 SYMPOSIUM—BY AND FOR DENTAL HYGIENISTS

The 4th International Symposium on Dental Hygiene will convene in Amsterdam, Holland on August 3, 4, 5, 1973. The Dutch Dental Hygienists' Association will host the meeting, which is expected to draw as many as 300 dental hygienists and other operating auxiliaries from throughout the world. Subtitled "Comparative Analysis of National Trends on Operating Dental Auxiliary Utilization," the program will be organized by Chairman Irene Woodall, representing the American Dental Hygienists' Association.

### SEMINARS AND SYMPOSIA

Roy L. Lindahl, D.D.S., Director, Office of Continuing Education, University of North Carolina will serve as the guest lecturer on a seminar departing for Yugoslavia and Greece on August 16, 1973. In addition to seminars to be conducted by Professor Lindahl, there will be an exchange program in the countries visited.

### ALASKA DENTAL SOCIETY FORMS NEW SERVICE CORPORATION

The creation and activation of a new dental service corporation, Alaska Dental Health, Inc., was reported recently in a joint announcement by officials of the Alaska Dental Society, its sponsoring dental association, and Dr. Geraldine T. Morrow, Anchorage, executive director of the Plan.

### OKLAHOMA LEGISLATURE APPROVES ENABLING BILL PERMITTING FORMATION OF DENTAL SERVICE PLAN

Enabling legislation permitting the formation of a dental service corporation was enacted in a recent session of the Oklahoma State Legislature. Passage of the enabling bill culminated two years of intense legislative effort by the Oklahoma State Dental Association to receive approval to form a not-for-profit service Plan to underwrite and administer prepaid dental care programs for consumer groups in the state.

### ACADEMY OF GENERAL DENTISTRY

The vice-president of the Academy of General Dentistry has labelled portions of the "Shopper's Guide to Dentistry" as "ridiculous and insulting" to dentists.

## ADA MEETING IN HOUSTON

More than 25,000 dentists, their wives and guests are expected to attend the 114th annual session of the American Dental Association scheduled October 28 through November 1 in Houston.

Housing accommodations will be offered in 41 hotels and motels in the city. Headquarters hotel will be the Hyatt Regency Houston Hotel, where the House of Delegates will meet, and co-headquarters hotel will be the Sheraton Lincoln Hotel.

The headquarters and co-headquarters hotels are reserved for officers and trustees, past presidents and past trustees, state society officers and official delegates and alternates.

The Opening Meeting will be held in the Houston Music Hall Sunday, October 28 at 9:30 a.m.

### NEW MEXICO INSURANCE DEPARTMENT APPROVES ADMITTANCE OF DENTAL SERVICE PLANS INSURANCE CO.

Insurance Department approval of the Dental Service Plans Insurance Company as an admitted carrier in the state was received from the office of the New Mexico Insurance Commissioner, according to a recent report received from Albert C. Wagner, DSPIC executive vice-president.

### REPLY TO ALLEGATION THAT FLUORIDATION HARMS BLACK CHILDREN

An allegation has been made by a health faddist organization which implies that fluoridation is harmful to the health of black children. A circular containing this allegation was sent by this group to offices of many U.S. senators.

In two separate letters to all members of the U.S. Senate, Dr. Eddie G. Smith, Jr., of Washington, D. C., NDA president, and Dr. Louid A. Saporito of Newark, N. J., ADA president, called the allegation "baseless" and totally false. They run counter to the overwhelming scientific evidence that has been meticulously accumulated for more than 30 years demonstrating the safety and effectiveness of fluoridation for all Americans, irrespective of their race.

### CHILD DENTICARE—SASKATCHEWAN

The Government of the Province of Saskatchewan has recently presented to the Advisory Committee on Dental Care for Children a comprehensive denticare program. This program envisages covering a wide range of services including diagnostic, restorative, endodontic, orthodontic, surgery and preventive dental health education for children from three to 12 years of age. The preventive services would include: Oral hygiene instruction, prophylaxis, topical fluoride application and orthodontics; the restorative procedures include operative dentistry and the placement of restorations. Surgery includes removal of primary and permanent teeth.

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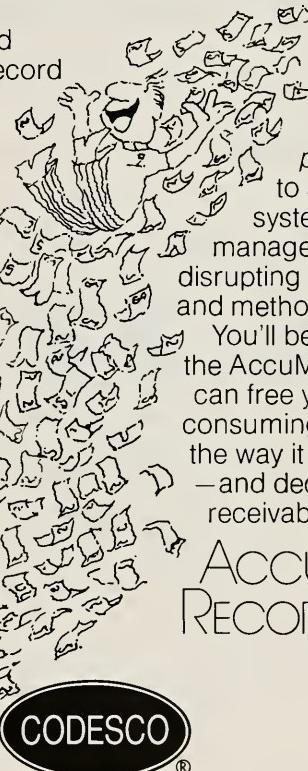
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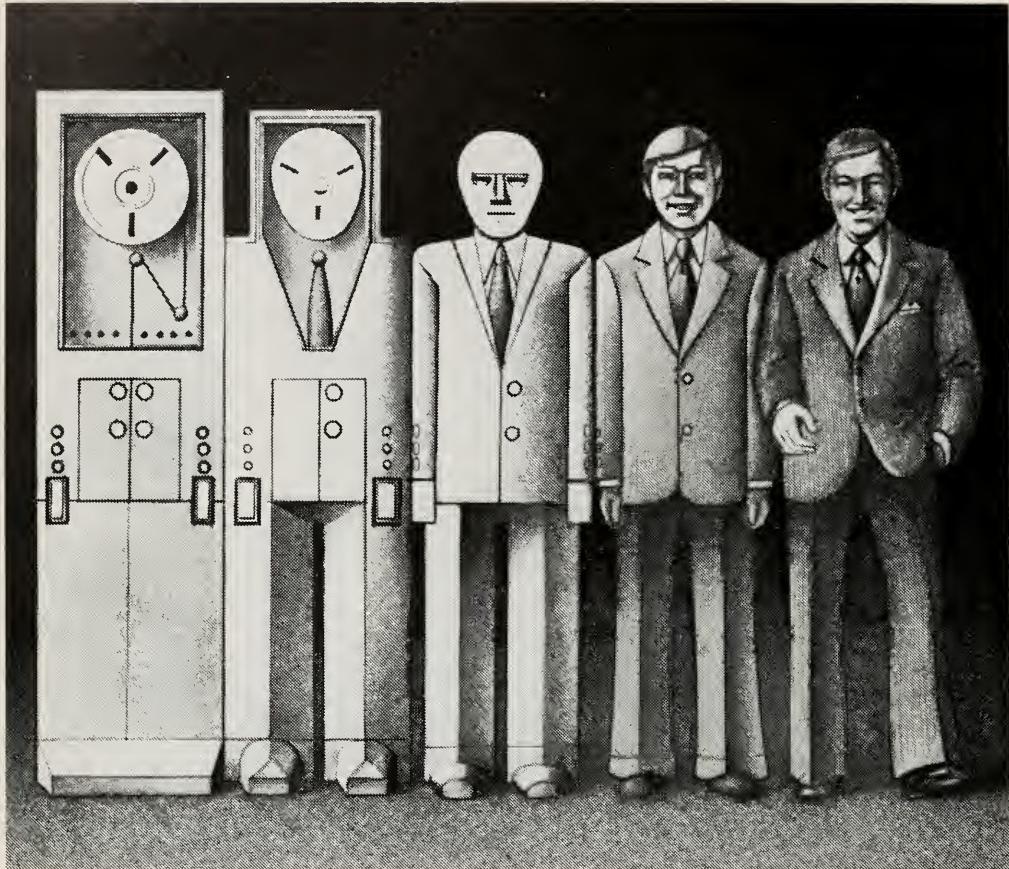
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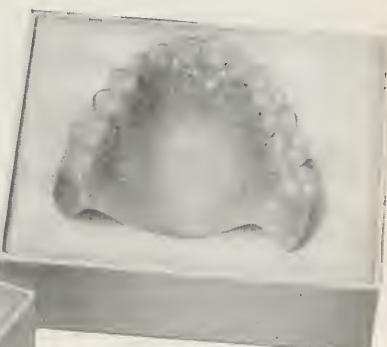
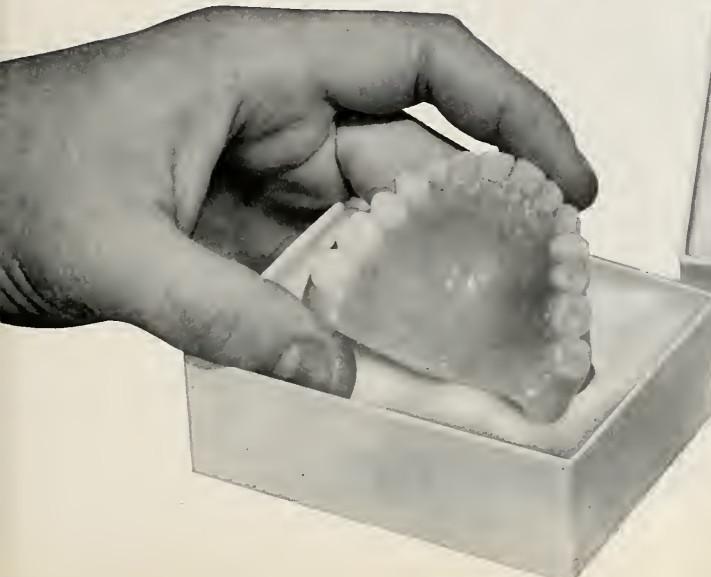
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# North Carolina DENTAL JOURNAL

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SEPTEMBER 1973



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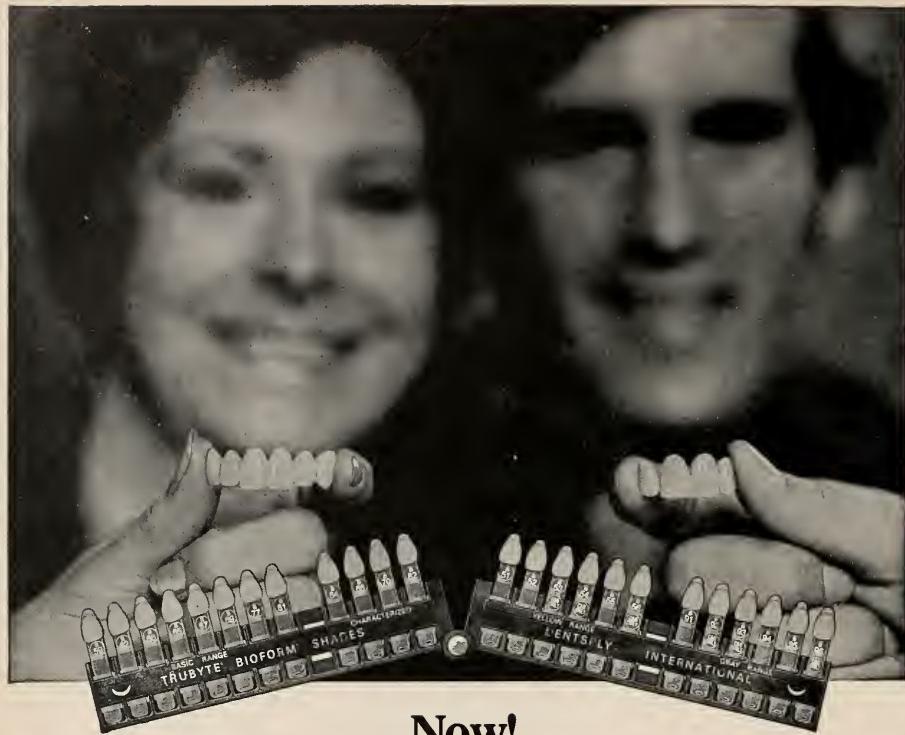
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## About The Cover

Governor James E. Holshouser, Jr., is North Carolina's 63rd elected Governor and the first Republican to occupy the Chief Executive Office in the 20th Century. He launched his political career in 1963 when he ran for a seat in the North Carolina House of Representatives and was elected by the largest majority of any legislator in Watauga County's history.

Governor Holshouser completed his undergraduate education at Davidson College in 1956 and graduated from the University of North Carolina School of Law in 1961. He practiced law in Boone just two short years before being elected to the legislature. His father, J. E. Holshouser, Sr., is a former U. S. Attorney and retired District Judge.

During four terms in the legislature, Governor Holshouser championed such causes as reorganization of state government, restructuring of higher education, drug control and legislative redistricting. He served as Minority Leader and Joint Caucus Leader during his tenure in the General Assembly.



His Excellency, The Honorable James E. Holshouser, Jr.  
Governor of the Great State of North Carolina

# EDITORIAL



The charcoal portrait of Governor Holshouser on the cover of this issue of the NORTH CAROLINA DENTAL JOURNAL does not imply that the North Carolina Dental Society is a partisan organization. It does imply that North Carolina dentistry is interested and involved in the state legislative process, and that dentistry feels it should play a vital role in the health care of the citizens of North Carolina.

Governor Holshouser has met with the leaders of the North Carolina Dental Society, the Dean of the School of Dentistry, and representatives of the State Board of Dental Examiners. Because of his demonstration of interest in dentistry as a part of the total health care of our state, we are pleased to present him on the cover of the current issue of the NORTH CAROLINA DENTAL JOURNAL.

Recently legislators met with leaders in the medical fields to discuss the delivery of health care in North Carolina. Dentistry had not been invited to participate. When this was brought to the attention of these responsible legislators they very quickly requested dental representation. We must make our presences and availability known and take every opportunity to participate.

Additional meetings with leaders in the legislature are being scheduled in order that the dental health needs of North Carolinians can be met.

Dental health care for the citizens of North Carolina as well as the prestige of the profession of dentistry depends upon every dentist in North Carolina becoming involved in the political process and other activities outside our own professional "clique."—RJS

# PRESIDENT'S REPORT

JOSEPH M. JOHNSON, D.D.S.

Laurinburg



I would like to express to you my appreciation for the privilege of serving as the President of the North Carolina Dental Society. It has been a most rewarding experience to get to know so many of you better as we have worked together on many of the issues and concerns of our profession. I have experienced much personal satisfaction from this job. I have also experienced frustration in that we have been unable to resolve some of the problems with which we are confronted. I am hopeful that this House of Delegates will be an active one - not afraid to take positive positions in areas of vital needs. For those of you who are here for the first time as either delegates or alternate delegates from your districts I urge you to speak out and be full participants in these two days of hard work which are ahead of us. We welcome the students from the University of North Carolina School of Dentistry. Even though you are non-voters in this House of Delegates your opinions and reactions to topics discussed here can have a meaningful impact on decisions which are made.

The Executive Committee of the North Carolina Dental Society during this year has met frequently for extended meetings in dealing with the business of the society. We have had many decisions to make - decisions which have not been easy. I feel, however, that every member of this Executive Committee will agree that each has felt free to express his viewpoints but that when final action has been taken we have had a consensus and unanimity unparalleled in most organizations. I would like to express my appreciation to the men on this committee for the dedication which they have shown to dentistry. To those of you who have worked on other committees of this society I would like to say "Thank you" for all that you have done. Many of you will continue in these committees assignments for the next year and perhaps will see some of the tasks which you have begun come to fruition.

At the direction of last year's House of Delegates an Inter-Agency Committee for Dentistry was formed. This group now known as the Dental Forum has met on three occasions in August, October, and February to discuss the interests and concerns of dentistry. These meetings have been well attended with representatives from the Executive Committee of the North Carolina Dental Society, the Division of Oral Health, the North Carolina State Board of Dental Examiners, the Spurgeon Dental Society, the presidents of the five districts, the administrative and teaching staff of the University of North Carolina School of Dentistry. Other groups have asked to send representatives to this Forum.

I feel that it has been productive to have men from these areas

of dentistry meet together in open dialogue to discuss issues in which we all are vitally interested. A committee is working on a Constitution and Bylaws for the Forum. There is some difference of opinion as to whether this group should be very loosely structured or have a firm pattern of organization. I believe this will be worked out during the next year. It is my hope that the Dental Forum will be all that its name implies - a place where all issues can be brought out in the open as frequently as they need to be looked at and that any differences over the mechanics of organization will not interfere with the real purpose behind the formation of this group.

The liaison between the Dental School and the Dental Society has improved during the last few years. It is vital that we work closely with the school. It would be almost impossible to have an adequate continuing education program without the guidance and support of the school. I feel that the University of North Carolina School of Dentistry is a product of North Carolina, that we the dentists have aided in its funding and staffing but we have given little input to the process of education itself. We have left this entirely to the professional educators. I feel that we have competent men on the faculty and staff of the school. However, the school can benefit from pragmatic feedback from its alumni and friends in the dental field. Visit the school and study its curriculum.

One of the concerns which I have heard most frequently from the practicing dentists across the state is that the students are not taught laboratory procedures and the time may come when this lack of skill and independence may be detrimental to them.

I urge you as members of the various districts to utilize the facilities and expertise of the community colleges in your area. These resources can bring additional benefits to the dental profession in the training of auxiliaries and in our own continuing education. Some of our members strongly feel that "X" hours of mandatory continuing education should be legislated into our structure for annual relicensure. However, I do not feel this to be in the best interest for the dentists of North Carolina at the present time. The Committee on Continuing Education is currently working on a plan to bring a more viable program for continuing education to the dentists in the state; a program which will give adequate notice of time and place with better geographical distribution of course offerings—a program so appealing and convenient that no dentist can find satisfactory reason not to take advantage of these opportunities and experiences. Our programs in the past have been fragmented and lacked continuity in content and overall coordination. Many of our dentists have worked

for years to improve the quality of these opportunities.

I feel we are arriving at a level in which many of these efforts will be rewarded. We hope that dentistry itself is becoming more cognizant of the fact that obsolescence in our field can occur rapidly. More of our patients are becoming dentally sophisticated and are beginning to demand excellence in the quality of care they receive.

The report from the Dental Health Committee deserves your careful attention. Take time to read it thoroughly. This committee was given a monumental task at the beginning of this year. They were asked to begin investigation of dental services in our various state operated institutions; such as our mental hospitals, correctional institutions, the schools for the blind and deaf, as well as the private orphanages in our state. They were also asked to take an objective look at the Division of Oral Health. We realize that this task was too great for any one committee to accomplish in any given year.

The report shows glaring needs in some of the institutions visited. The dentists in these programs are working with sub-standard facilities; such as space, lighting, and equipment. Sometimes there is no auxiliary help available. There appears to be little communication with the medical or supervisory officials in these institutions. We might say that dental care is so limited that we have veritable dental snake pits insofar as oral health is concerned. I would like to insist that as these facts are uncovered that they be brought to the attention of the highest officials who have control over these operations. This dental society should make specific recommendations for minimal dental health standards and work towards the establishment of more ideal standards. A decision should be made by this House of Delegates as to whether the report of this committee should be made public to the various news media at this time or whether we, as a profession, should offer positive suggestions to state officials for improvement; such as: The establishment of model preventive programs in some of these institutions, or other experimental or innovative approaches. It has been called to my attention that the salaries of dentists hired by the state have not kept pace with the salaries of medical doctors hired by the state. Steps have been taken to seek to remedy this condition. I recommend that the work of this committee be continued and specific guidance be given by this House of Delegates as to what action oriented procedures should be followed. We might also recommend that the committee take a look at term nursing care facilities for the aged.

In all frankness and honesty I must inform you that ideological and philosophical differences do exist between the members of the North Carolina Dental Society and the North Carolina State Board of Dental Examiners. We should discuss these differences openly and not just behind closed doors in the inner sanctums of committees. I have respect for the men who serve on the State Board as individuals and appreciate the time and effort given to their job. However, as President of your Society I feel I must express some of the reservations that I have toward the actions and attitudes of the present State Board. Just as we are able to examine critically other areas of dental concern in the various state agencies I feel we should not hold the State Board of Dental Examiners in awe or be influenced by a possible halo effect emitting from the position itself. We should be able to criticize openly any action or lack of action which we feel is justified and not feel condemned for stepping on sacred ground. Many dentists in this state feel that our present Board of Dental Examiners who are financed by our licensed renewal fees and who have been elected to this position by the dentists are hiding behind the letter of the law instead of the spirit of the law. There have been many decisions made by the State Board that many dentists feel are too limited and autocratic and do not represent the forward thrust of the profession. The Attorney General of the State of North Carolina and the Attorney of the North Carolina Dental Society have agreed that certain interpretations of the law are left to the discretion of the Board. The State Board we feel is being too dependent upon the advise of the Attorney hired by the Board and answerable only to the Board. We feel

that the laws of North Carolina allow more flexibility than the Board chooses to utilize. This places the University of North Carolina School of Dentistry and individual dentists in restraints that we do not feel necessary. The Executive Committee of the North Carolina Dental Society recommends that we seriously evaluate our present method of determining board membership. At present nomination to the Board can be made by ten signatures of licensed dentists on a ballot. Too frequently the eighteen hundred licensed dentists in this state have not been aware of the philosophies of those who choose to serve on the Board and as dentists we have been apathetic about nominating individuals to this body. I do not mean to infer that the present Board or any past Board is always unanimous in their decisions or have made unwise judgments. I do suggest that we should have more input into the selection of the Board. One member of the present Board was selected by five people all members of the Board. Each of the remaining members of the Board were selected upon the nomination by ten licensed dentists. There being no other nominations they were automatically selected.

A resolution will be introduced to this House of Delegates by the Executive Committee of the North Carolina Dental Society that nominations to the board be made at our annual session rather than only through the usual procedure of nomination by mail. This does not preclude additional nominations by mail upon the signature of ten licensed dentists in this state. The balloting can continue to be done by mail but if nominations are presented at our annual meeting our total membership will be more actively involved in the selection of the State Board. In the long run I feel that the board will be more representative of and responsive to the dental profession as a whole and that there will be an improvement in the image of the board.

I hope that all of you have taken a close look at the study on Prevention which was made by Dr. Frank Law of Bethesda, Maryland. This was the basis of a proposal made by our Committee on Prevention which has been submitted to the General Assembly of the State of North Carolina. The Prevention Committee has worked hard and long in their efforts to get such a program initiated. I commend this committee for its work and I am sure that the dentists of the state will give their full support to such an effort. We are realistic in the recognition that prevention cannot be a cure-all for all dental problems which our people now face. Much dental disease today is of a residual nature but with the implementation of preventive measures many of our patients can look forward to better oral health in the future.

More and more our lives, personal and professional, are being dominated by political decisions. Elective and appointive officials are having an increased influence on what we do today as well as the determination of our future. It behooves us as dentists to help shape the direction in which we are moving by becoming more politically involved. During the past year we have had the organization of ADPAC in our state. This can be a most significant force in helping to put into public office those who have the ability, interest and insight for perceptive leadership. We cannot sit back in indifference and apathy and then wring our hands in righteous indignation if we have been feeble in our foresight and commitment.

ADPAC is just one important avenue through which we can move. We can also speak out to our own legislators and legislator-aspirants on the local, state and national levels. We need to be informed and unafraid to get into the swim of political action. For too long dentists as a group have been outside the fishbowl looking in. Let us not be afraid to enter the water of politics.

It is my belief that we will go more and more into Third Party Dentistry. We have tried in the past few weeks to work with the new state administration to urge programs that are rehabilitative rather than poorly palliative. At the time of this writing it is not known what our successes or failures will be. The new Secretary of the Department of Human Resources has assured us that our recommendations to restore Title XIX with the modifications outlined by last years House of Delegates have been sent to the Advisory Budget Commission. We do not know at this time

whether or not this program will get by the numerous legislative hurdles which any attempted legislation faces. I need not review for you the frustrations which have been part of the Title XIX program thus far. They have been well documented. We must as a dental society continue to insist that any publicly funded program be for the best interest of the patient and that our tax dollars be spent wisely to foster good oral health rather than for archaic mutalitative practices which such programs have fostered in the past.

I do know and am chagrined to discover the low esteem in which oral health has been held in the eyes of many of our public officials. This again points out that we as dentists are not telling the story of dentistry forcefully enough. We need more input into the thinking of the medical doctors in our state programs as well as in our local communities and hospitals. We need to know the physical condition of our patients to treat them most effectively. By the same token the medical doctors need to be apprised of the value of good oral health in the overall scheme of the healthy individual and to recognize the importance of oral health facilities in comprehensive health planning. Too frequently this has been minimized. We must speak out for dentistry.

This points up the crying need for a well developed Delta Plan so that we as dentists can at least offer to a segment of our population a prepayment plan that is well constructed to give high quality care. I urge your continued support of the North Carolina Delta Plan, Inc. Secure the cooperation of any dentists in your area who have not as yet become actively associated with this program. Interpret to these individuals your convictions that the North Carolina Delta Dental Plan has validity and merit.

An upgrading of the Veterans Administration Dental program is currently in Washington for approval. The Federal Dental Services Committee has worked on this and are to be commended for their efforts. They are still frustrated in their efforts to have the remote area classification removed from the Goldsboro-Fayetteville area.

There are other areas in Third Party care that need continued emphasis; such as, Vocational Rehabilitation and the School Health Program.

I have asked the chairman of the Committee on School Health to try to get this program upgraded to an acceptable level, one which we as dentists can work with, or else recommend to the House of Delegates that the North Carolina Dental Society recommend to its members that they cease being a party to the mutilation of a child's mouth. We don't want to abdicate a school health program but this may be a sanction we will be forced to adopt in order to protest inferior treatment for children.

These programs have been conducted on the level but we have been told that the guidelines have been dictated at the state level. This bureaucratic arrangement has led to the inability to pinpoint responsibility in the policy making process. Only recently has the chairman of our school health committee been able to find an individual who says that he has been part of the decision making group. Talks are in process at the present time.

I would like for the House of Delegates to resolve that if these talks prove fruitless before the next school term opens that the Executive Committee of the North Carolina Dental Society recommends to the members of this society that they regrettably withdraw from the program until definite indications of improvement can be established.

One of the topics which we have discussed frequently in the past few years is the need for expansion of duties of our auxiliaries. We need a consensus of opinion from the members of this society as to what we really want in the way of expanded duties. We have never actually gone to the Board of Dental Examiners with a full expression from the membership. This is an omission which we need to rectify.

Last August I met with the North Carolina Dental Assistants Association and more recently with a group from the North Carolina Dental Hygienists Association. Some of the members of the Executive Committee were able to listen to some of the concerns of hygienists. They are not opposed to expanded duties for dental

assistants but feel that some indication should be made as to how this might affect the role of the hygienist in the office. Many hygienists feel that they have no autonomy or freedom of action.

I feel that the hygienist should work in the dental office under the general supervision of the dentists. However at present she receives only marginal professional status from the dentist or the patient. Unfortunately the term "check behind the hygienist" has been used too frequently rather than the term "examine the patient". If during the course of patient examinations we find that the hygienist is not doing a good job we should no longer retain her service in our office.

We need to listen to the leaders of our dental assistants and hygienists in order that we can be aware of their problems and thinking. We need to read their publications and when invited if possible attend their programs.

We are proud of the new format of the Journal of the North Carolina Dental Society and we would like to express to the editor and contributors our gratitude for an excellent job.

To have an impressive journal and to be able to reach our membership more effectively, and to conduct the business of the society in the most optimum manner it is necessary to have an increase in dues for the coming year. We realize that there are many areas in which our membership needs to be served and strongly feel that this can be accomplished by asking for a ten dollar increase in dues. We feel that this will be acceptable to the House of Delegates.

The Central Office has much of the responsibility for the routine work of the society. I would like to introduce three recommendations in regard to the Central Office:

First, that the salary arrangement for the Executive Secretary be negotiated at the time of contract renewal each year in lieu of fixed salary increases.

Second, that any travel or convention expense of the wife of the Executive Secretary be determined and approved by the President of the Society and the elected Secretary-Treasurer prior to such incurrence rather than as now stated.

Third, that the Central Office provide more secretarial aid to the various committees of the society.

On March fourth the Executive Committee met at the Central Office for the primary business of reviewing the report of the Long Range Planning Committee. I shall not review item by item the content of this report. I hope that each of you will read it carefully. A number of resolutions will be introduced during these two days as an outgrowth of the work of this committee.

I believe that long range planning is one of the most important tasks that this dental society faces. Change in our emphasis and activities frequently comes as a direct result of the serious thinking that goes into the work of this committee. I feel that this is a committee which is interested in hearing from you as the dental leaders in our state.

I appreciate the opportunity which has been given to me to bring to your attention some of my beliefs about the needs of our dental society. I am sure that you will not agree with all that I have said but it is my hope that some of my remarks will stimulate a lively discussion.

Let us remember that despite differences we may have in viewpoints you and I are attending this meeting because of our love of dentistry.

## District Officers Conference

December 8, 9, 1973

Velvet Cloak Inn, Raleigh

# Report of the Secretary-Treasurer

J. HARRY SPILLMAN, D.D.S.  
Winston-Salem



## Audit for Fiscal Year Ended May 31, 1973

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Exhibit A.....	Balance Sheet
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Supplementary Information:	
Schedule 1.....	Marketable Securities— Relief Fund

### The Officers and Directors North Carolina Dental Society

We have examined the balance sheets and related statements of income, expenses and fund balances for the General Fund, Relief Fund and Development Fund, together with supporting schedules, of the North Carolina Dental Society for the year ended May 31, 1973. Our examination was made in accordance with generally accepted auditing standards applicable to accounts maintained on the cash basis and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Inasmuch as the records are maintained on the cash basis of accounting, income earned but not received and expenses incurred but not paid, if any, are not reflected in the accompanying financial statements.

In our opinion, the accompanying financial statements present fairly the financial position of the North Carolina Dental Society at May 31, 1973, and the results of its cash transactions for the year then ended, on a basis consistent with that of the preceding year.

LYNCH, McMILLAN & ROBERTSON

June 13, 1973

### Exhibit A

#### GENERAL FUND Balance Sheet—May 31, 1973

##### Assets

Cash:	
Checking account—First Citizens Bank & Trust Co., Raleigh, North Carolina .....	\$ 5,046.87
Savings account—First Citizens Bank & Trust Co., Raleigh, North Carolina .....	1,959.16
Savings account—First Federal Savings and Loan Association, Durham, North Carolina .....	20,079.32
Savings account—Raleigh Savings & Loan Association, Raleigh, North Carolina .....	20,081.96 \$ 47,167.31
Stock in Dental Service Plans Insurance Company, at cost.....	5,000.00
	<hr/>
	\$ 52,167.31

##### Liabilities and Fund Balance

Liabilities .....	\$ —
Fund balance: .....	
Appropriated:	
Prior years:	
Library and History Committee.....	\$ 1,600.00
For study of central office needs.....	1,000.00
Insurance consultant services.....	\$ 2,500.00
Current year expenditures.....	2,260.00 240.00 2,840.00
Unappropriated .....	49,327.31
	<hr/>
	\$ 52,167.31

**GENERAL FUND**  
**Statement of Income, Expenses and Unappropriated Fund Balance**  
**Year ended May 31, 1973**

Fund balance—May 31, 1972.....	\$ 66,578.92
<b>Income:</b>	
Dues and penalties collected.....	\$181,841.00
Revenue from Annual Session.....	16,995.00
Revenue from publications.....	7,976.18
Interest on savings.....	579.86
Interest on corporate bonds.....	437.50
Dividends on corporate stocks.....	471.90
Net gains (loss) on sale of securities.....	(11,839.21)
Expense reimbursements, refunds and sundry.....	1,772.62
	<hr/>
	\$198,234.85
<b>Expenses:</b>	
Dues and penalties remitted:	
American Dental Association.....	\$ 95,865.00
A.D.A. Relief Fund.....	1,581.00
First District, North Carolina.....	2,650.00
Second District, North Carolina.....	3,535.00
Third District, North Carolina.....	3,490.00
Fourth District, North Carolina.....	2,405.00
Fifth District, North Carolina.....	2,180.00
North Carolina Dental Society Relief Fund.....	10.00
	<hr/>
\$111,716.00	
Central Office expense.....	63,004.52
Journal expense .....	11,180.47
Newsletter .....	1,647.79
Directory .....	1,052.72
Dental Assistant Subcommittee.....	154.52
American Dental Political Action Committee.....	317.16
North Carolina Dental Society Executive Committee.....	47.24
Dental Forum .....	35.23
District Officers' Conference.....	426.98
Annual Session expense.....	13,078.82
Reimbursement of Delegates and Representatives.....	11,108.08
Contributions .....	180.00
Memberships .....	755.50
Miscellaneous .....	781.43
	<hr/>
Total expenses .....	\$215,486.46
	<hr/>
Net (loss) .....	(17,251.61)
Fund balance—May 31, 1973.....	\$ 49,327.31

**GENERAL FUND**  
**Detail Schedule of Expenses**  
**Year ended May 31, 1973**

Central Office expenses:	
Salaries and payroll taxes.....	\$ 40,368.16
Rent .....	8,295.80
Supplies .....	2,102.48
Office machine maintenance.....	796.43
Telephone .....	3,910.43
Postage .....	1,285.06
Travel—Executive Secretary .....	419.15
Hazard insurance .....	169.00
City and county taxes.....	117.89
Newscutting service .....	198.00
Employee insurance .....	632.46
Audit .....	500.00
Legal counsel .....	2,913.07
Investment counsel .....	452.00
Addressing service .....	662.72
Miscellaneous .....	181.96
	<hr/>
	\$ 63,004.52

Annual Session expenses:		
Arrangements .....	\$ 3,559.88	
Exhibits .....	2,916.26	
Entertainment .....	2,883.65	
House of delegates .....	500.26	
Program .....	2,728.40	
Publicity .....	460.37	
Necrology .....	30.00	
		\$ 13,078.82

Exhibit D

RELIEF FUND	
Assets	
Cash:	
Checking account—North Carolina National Bank, Raleigh, North Carolina .....	\$ 864.55
Savings account—First Citizens Bank & Trust Co., Raleigh, North Carolina .....	167.37
On deposit—E. F. Hutton and Company, Inc.....	437.50
	\$ 1,469.42
Marketable securities, at cost (market value \$50,765.25).....	62,203.92
	\$ 63,673.34
Liabilities and Fund Balance	
Fund balance .....	\$ 63,673.34

Exhibit E

RELIEF FUND	
Statement of Income, Expenses and Fund Balance	
Year ended May 31, 1973	
Fund balance—May 31, 1972.....	\$ 60,703.53
Income:	
A.D.A. Relief Fund.....	\$ 2,108.00
Interest on savings .....	36.15
Interest on corporate bonds .....	1,143.75
Dividends on corporate stocks .....	1,405.68
Net gains on sale of securities.....	3,942.23
Reinstatement fees .....	10.00
Total income .....	\$ 8,645.81
Expenses:	
Relief grants .....	\$ 4,975.00
Investment counsel .....	576.00
Audit .....	125.00
Total expenses .....	\$ 5,676.00
Net income .....	\$ 2,969.81
Fund balance—May 31, 1973.....	\$ 63,673.34

Exhibit F

DEVELOPMENT FUND	
Statement of Income, Expenses and Fund Balance	
Year ended May 31, 1973	
Fund balance—May 31, 1972.....	\$ 432.26
Income:	
Interest on savings.....	\$ 5.74
Sale of equipment.....	250.00
Total income .....	\$ 255.74
Expenses:	
Property taxes on leased equipment.....	\$ 26.53
Purchase of office equipment.....	661.47
Total expenses .....	\$ 688.00
Net loss .....	(432.26)
Fund balance—May 31, 1973.....	\$ —0—

**CAPITAL FUND**  
Balance Sheet—May 31, 1973

Assets				
Furniture and equipment, at cost.....				\$ 13,662.11
<b>Liabilities and Fund Balance</b>				
Fund balance—May 31, 1972:				
Investment in fixed assets.....				\$ 14,406.37
Additions:				
1 Walnut panel for desk.....			\$ 34.11	
1 Gray file .....			401.11	
2 Walnut bookcases .....			351.00	786.22
Deletions:				
2 Flexolamps .....			\$ 62.73	
1 Bates electric stapler.....			87.55	
1 Model 1955 addressograph with attachments.....			1,380.20	(1,530.48)
Fund balance—May 31, 1973.....				\$ 13,662.11

**RELIEF FUND**  
Schedule of Marketable Securities  
May 31, 1973

Schedule 1

Corporate Bonds:		Type	Cost	Market Value
Unit	Issue			
\$10,000	American Telephone & Telegraph Co.....	8 3/4-2000	\$ 10,370.76	\$ 10,975.00
5,000	United Aircraft .....	5 3/4-1991	3,771.87	3,625.00
	Total corporate bonds.....		\$ 14,142.63	\$ 14,600.00
Corporate Stocks (units in shares):				
100	CNA Financial .....	Com.	\$ 2,240.60	\$ 1,425.00
200	Crown Central Petroleum.....	Com.	5,219.05	3,600.00
76	Walt Disney Productions.....	Com.	7,869.25	7,077.50
100	Emhart Corporation .....	Com.	3,898.08	2,412.50
200	Firestone Tire & Rubber Co.....	Com.	5,003.33	4,300.00
6	Hydron Europe .....	Com.	30.00	12.75
200	Ideal Basic .....	Com.	2,448.00	2,800.00
100	International Harvester .....	Com.	2,923.38	3,012.50
100	Johns-Mansville Corporation .....	Com.	3,626.88	2,350.00
100	National Patent Development.....	Com.	5,900.00	750.00
100	Nucor Corporation .....	Com.	2,177.29	1,862.50
100	T1 Corporation .....	Com.	2,872.43	2,312.50
100	Union Carbide .....	Com.	3,853.00	4,250.00
	Total corporate stocks.....		\$ 48,061.29	\$ 36,165.25
	Total .....		\$ 62,203.92	\$ 50,765.25

**AMERICAN DENTAL ASSOCIATION**  
**114th ANNUAL SESSION**  
**OCTOBER 28 - NOVEMBER 1, 1973**  
**HOUSTON**

# Report of the Editor-Publisher

ROBERT J. SHANKLE, D.D.S.

Chapel Hill

When your Editor assumed his post with the preparation of the January issue of the Journal it was with the understanding that the format could be altered to include many changes, some of which were: (1) to produce a superior State Dental Journal (2) promote the State of North Carolina as well as the profession (3) include scientific and human interest articles for publication (4) to be used as a forum to discuss problems of the profession and as a medium to support our profession and promote the health of the people of North Carolina (5) that means be explored to make students affiliate members of the North Carolina Dental Society and (6) that the District Editors be elected to serve more than one year terms in order to promote continuity in the development of the Journal.

We have been successful to a large degree, in a short period of time, in bringing about a number of these changes. However, it should be emphasized, here and now, that our task in developing a Journal worthy of this Society and this fine State is not complete, for it requires time and a publication of many issues in order to produce a quality publication. The production of the type of Journal that we want requires generous funding. The present Journal far exceeded our expectations cost wise.

We were in a dilemma as to whether to continue with the old format due to a limited budget for the Journal, or to change with Volume 56 in January 1973. We had little choice in this matter, because to delay for another year did not appear appropriate and change in the middle of the year was not feasible.

We cannot predict the amount of increased revenue from advertising at this time, though it appears that this revenue will result, in time, under the competent and enthusiastic leadership of our advertising editorial consultant, Dr. Carl W. Mason, Jr. To many in our Dental Society it appears unprofessional and miserly for a profession and a society, as great as ours, to allow advertising to dominate the Journal, and to influence decisions as to the quality and attractiveness of it. In view of the small amount in addition that it would cost each member yearly, I personally would like to retain the dignity of the Society and the profession by not pressing the issue of allowing advertising to determine the product of our Journal.

I would like to urge the House of Delegates to approve the necessary funding to continue the publication of the Journal in its present format and to permit its continued improvement and development.

## Report of the Executive Secretary

ANDREW M. CUNNINGHAM

Raleigh

Submitted herewith is my eighteenth annual report as required by the *Bylaws*. It would be impossible and impractical to record in detail my stewardship of the affairs of the Society in your behalf during this administration. However, I will briefly comment on significant items which I think should be brought to your attention.

**Central Office.** September 7, 1972 was moving day, and the Central Office was relocated. Since that date we have been occupying approximately 1550 square feet of office space in the Meredith Woods Professional Building at 2310 Myron Drive in Raleigh. While we were reluctant to make the move we had no choice. The State purchased the building we had occupied on East Peace Street since 1967 and would not, under any circumstances, renew our lease when it expired. However, it has proved a happy move. Our new landlords were generous in providing for our requirements as far as floor design, wall covering, cabinets and storage space at no extra charge. The office is comfortable and functional. More important there is room for expansion to meet future demands.

Adjoining our office are the offices of Delta Dental Plan of North Carolina and this has been a most convenient arrangement for both the Society and the Service Corporation, especially in its organizational period. It has afforded them convenient access to our membership file for mailing purposes and has eliminated the necessity of duplication of records and copying facsimiles. We have saved the Corporation from having to expend money at a critical time as far as its financial condition is concerned.

At the same time we have been able to provide the Corporation with sufficient office equipment to meet their immediate needs.

The Corporation is paying the rent on the space it now occupies.

When Delta Dental becomes licensed and fully operational it will require more adequate office area and it is contemplated that adequate space will be available in the same building. At that point it is anticipated that the Central Office will expand into the quarters now occupied by Delta Dental.

**Membership.** For the past several years our membership has increased on an average of 40 members annually. As of March 26, 1973 we had 1,588 active and life members on our roster. Of this total approximately 200 are non dues paying members (life, military, disabled).

It is of interest to note that when I became the first Executive Secretary in 1955 there were 937 members.

**Publications.** One of the duties of the executive secretary is to serve as Managing Editor of THE JOURNAL. I am sure that the members are well pleased and extremely proud of the "new look" of THE JOURNAL. This has been the result of hard work and imagination of Dr. R. J. Shankle who assumed the duties of Editor-Publisher beginning with the January 1973 issue.

The change over has increased the publishing cost and the members should recognize that more financial support will be needed to underwrite the publication. Advertising rates have been doubled in order to alleviate the situation and this has caused some difficulties. For instance, some advertisers have cancelled contracts because of the increase. This we anticipated. However, the majority of advertisers went along with the increase and we have picked up a few new ones. We hope that this situation will improve with each succeeding issue.

It should be pointed out, however, that the Society should not expect income from advertising to underwrite the entire cost of publishing a journal. This would permit advertisers to control the quality and content of the publication and the end result would be somewhat less than a first-class publication.

The Central Office continues to be responsible for the publi-

cation of the *Newsletter* as a means of keeping the members informed on the activities of the Society. By its very nature, it is limited in its content to news in capsule form for quick reading and we find it a useful tool of communication with the membership.

The Central Office is also responsible for compiling an annual directory. This has proved to be a handy and useful desk reference for the members. This year a new section has been added listing the local dental societies in the State. If your particular local organization is not included in the 1973 issue, please let the Central Office know.

**Committee Work.** The Blue Book is ample evidence that the several standing and special committees have been active and productive. It is the responsibility of the executive secretary to coordinate the activities of these committees and this has been an exacting and time consuming task. The Central Office has furnished the committees administrative and clerical support insofar as staff and time permitted. It would be most helpful if all committees elected secretaries who would furnish the Central Office with minutes of their meetings.

**District Officers Conference.** Over the years the District Officers Conference has gradually changed its format and content. When it was originally organized twenty years ago its main purpose was to train District Officers to better fulfill their duties and responsibilities. During the past several years the Conference has devoted less time in this area and has served as a forum and workshop on various issues facing organized dentistry. While this has been a fruitful and helpful means of informing the members it has minimized to a great extent proper training of District leadership.

Workshops on topics of interest and concern to the profession are an effective means of informing the members and are to be encouraged. However, it is suggested that they be planned apart from the District Officers Conference.

**Annual Session.** Last year the Carolina in Pinehurst changed hands and the hotel staff with whom we had worked closely for so many years was gradually replaced. The new management was very cooperative but, as was to be expected, policies underwent changes which necessitated our adjusting to them in the planning of our Annual Session. We are making these adjustments, although it has not been easy.

The hotel was completely remodeled and the improvements made were unbelievable. However, in the process the hotel preempted the exhibit hall for office space. As a result it was necessary to relocate the commercial exhibits in other areas of the hotel and this left no available space for scientific exhibits, which is an important part of every annual meeting. How long this situation will exist we have no idea, but the hotel has on the planning board the construction of a convention hall on the hotel premises which will relieve this situation.

**Thanks.** I am grateful for the support and understanding of the State and District Officers during the year. They have made my job as an administrator less difficult and I appreciate their cooperation.

Many thanks go also to the Central Office staff for their loyalty, competency and efficiency. Mrs. Pace and Miss Kiser are real assets not only to the Central Office but to the Society. I have delegated many responsibilities to them and they have capably and willingly fulfilled them.

## Minutes of Executive Committee

### MINUTES OF EXECUTIVE COMMITTEE

May 17, 1972	January 6, 1973
June 17, 1972	January 7, 1973
August 11, 1972	February 17, 1973
October 8, 1972	March 4, 1973
October 15, 1972	March 30, 1973
December 9, 1972	

### PINEHURST, NORTH CAROLINA May 17, 1972

**Call to Order.** The Executive Committee convened in the Crystal Room of The Carolina, Pinehurst, Wednesday, May 17, 1972 at the close of the 116th Annual Session. President Joseph M. Johnson called the meeting to order and Dr. Fay H. Culbreth led in prayer.

**Roll Call.** Officers present were: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; and J. Harry Spillman, secretary-treasurer.

Committee members present were: Frederick G. Hasty, chairman; Fay H. Culbreth, William A. Current and Wade H. Bresland.

Staff member present: Andrew M. Cunningham, executive secretary.



**FREDERICK G. HASTY, D.D.S.**  
Chairman  
Fayetteville

**Introduction of New Members.** Dr. Johnson announced the appointment of Dr. Frederick G. Hasty as a member of the Executive Committee for a term of three years and as chairman for 1972-73.

He welcomed to the Committee Dr. J. Harry Spillman, newly-elected secretary-treasurer, and Dr. Robert B. Litton, newly-elected vice president, and congratulated Dr. James A. Harrell on his election to the office of president-elect.

He noted that the terms of Dr. William L. Hand, Jr., Dr. Robert H. Gainey, and Dr. C. W. Horton had expired and requested the secretary-treasurer to send letters of appreciation to them for the fine services they had rendered.

Dr. Johnson announced that since the Third and Fifth Districts had no official representative on the Executive Committee for 1972-73, he had invited the Districts to send representatives to Executive Committee meetings with the privilege of participat-

ing in the deliberations but without vote. He announced that Dr. James A. Privette was representing the Fifth District at this meeting and Dr. C. W. Horton was representing the Third District.

Dr. Hasty assumed the chair and presided for the remainder of the meeting.

**Approval of Minutes.** The minutes of April 15, 1972 were approved on motion by Dr. Harrell, seconded by Dr. Breeland.

**Report of Secretary-Treasurer.** The report of the Secretary-Treasurer as of April 30, 1972 was received for information on motion by Dr. Johnson, seconded by Dr. Harrell.

**Report from N. C. Delta Dental Plans.** Dr. Glenn F. Bitler, president, N. C. Delta Dental Plans, Inc., reported that 735 dentists had signed participating agreements and that the Corporation's assets now totalled approximately \$37,000.

He stated that the Board of Directors had interviewed an excellent and well qualified prospect for the position of Executive Director of the Corporation and that he would be available for the position August 1, 1972. Dr. Bitler pointed out that the man had had many years of experience in all phases of prepayment dentistry with HEW and that he had spent 18 months organizing the Delta Dental Plan in Michigan.

He stated that the Board of Directors had approved the employment of the man at an annual salary of \$24,000 plus fringe benefits, travel and other expenses.

Dr. Bitler reported also that the Board of Directors of the Dental Foundation of N. C. had agreed to pay \$6,000 annually for 2 years toward this man's salary provided he spent 20 per cent of his time working for the Foundation.

Dr. Bitler stated that the Corporation would attempt to establish a line of credit of \$25,000 with a commercial bank and requested a line of credit in the same amount from the Society in order to finance the Corporation in its initial stages and to become licensed by the Insurance Commissioner and become operative.

Dr. Johnson moved that the Society try to establish a line of credit up to \$25,000 for the Corporation. Dr. Harrell seconded the motion and it was carried.

Dr. Spillman moved that a line of credit be established to the N. C. Delta Dental Plans, Inc., available August 1, 1972 up to \$25,000, at a draw not to exceed \$12,500 the first annum, and at an interest rate of the loan acquired by the Corporation from a commercial bank in North Carolina, provided the Corporation established a line of credit of \$25,000 with a commercial bank as of August 1, 1972. Dr. Johnson seconded the motion and it was carried.

Dr. Bitler agreed that the Corporation would draw on its line of credit with the commercial bank first.

Dr. Johnson moved that the Finance Committee be instructed to determine and recommend the source of funds to sustain the line of credit to N. C. Delta Dental Plans, Inc. Dr. Culbreth seconded the motion and it was carried.

Dr. Breeland moved that a letter be sent to N. C. Delta Dental Plans, Inc., informing the Corporation that the Executive Committee had approved the establishment of a line of credit to the Corporation. Dr. Culbreth seconded the motion and it was carried.

Dr. Breeland moved that Dr. Bitler be commended for his leadership and untiring efforts in establishing a Delta Dental Plan in this state. Dr. Johnson seconded the motion and it was carried.

**Appointment of Editor-Publisher.** Action on the appointment of an Editor-Publisher to succeed Dr. Benjamin R. Baker who had resigned effective with the August 1972 issue of *The Journal* was deferred until the next meeting on motion by Dr. Johnson, seconded by Dr. Harrell.

**Appointment of Executive Secretary.** On motion by Dr. Johnson, seconded by Dr. Current, Mr. Andrew M. Cunningham was re-appointed executive secretary for 1972-73 with a salary ac-

cording to the schedule of payment adopted by the 1966 House of Delegates.

**Legal Counsel.** Dr. Johnson moved that the firm of Joyner and Howison of Raleigh be retained as legal counsel for the Society for 1972-73. Dr. Breeland seconded the motion and it was carried.

**Finance Committee.** Dr. Johnson announced the appointment of the following to the Finance Committee: Dr. James A. Harrell, chairman; Dr. J. Harry Spillman and Mr. Andrew M. Cunningham.

**Secretaries Management Conference.** On motion by Dr. Johnson, seconded by Dr. Culbreth, Dr. J. Harry Spillman was designated to represent the Society at the annual Secretaries Management Conference at ADA Headquarters in Chicago, June 5-7, 1972.

**1974 Annual Session.** It was noted that the Society in general session voted to return to The Carolina for its annual session in 1974. On motion by Dr. Harrell, seconded by Dr. Johnson, the dates of May 12-15, 1974 are to be confirmed with The Carolina for the 118th Annual Session.

**National Health Service Corps.** On motion by Dr. Johnson, seconded by Dr. Harrell, the following policy statement concerning the assignment of National Health Service Corps personnel in North Carolina was approved:

The Society endorses the concept of assigning National Health Service Corps personnel in needy areas in North Carolina approved by the North Carolina Dental Society and the National Health Service Corps. Assigned personnel must be licensed under the dental laws of North Carolina and the use of auxiliary personnel must conform to the rules and regulations of the North Carolina Board of Dental Examiners.

On motion by Dr. Breeland, seconded by Dr. Johnson, a letter is to be sent to the District presidents stating that all remote area requests must meet the criteria of the National Health Service Corps for a remote area and that the Districts must make recommendations on the requests before sending it to the North Carolina Dental Society for approval.

**State of Franklin Request.** A request from the State of Franklin Health Council, Inc., for the assignment of National Health Service Corps personnel to Cherokee, Clay, and Graham counties was approved subject to the policy statement approved by the Executive Committee on motion by Dr. Current and seconded by Dr. Harrell.

**Hot Springs Health Program Request.** A request from the Hot Springs Health Program for the assignment of National Health Service Corps personnel to provide medical and dental care for the 5,500 residents of Western Madison County was referred to the First District Dental Society for recommended action on motion by Dr. Culbreth, seconded by Dr. Current.

**Department of Youth Development Request.** On motion by Dr. Breeland, seconded by Dr. Culbreth, a request from the Department of Youth Development that dentists from Fort Bragg serve the dental needs of the students at Samuel Leonard School in McCain on a volunteer basis was referred to the State Board of Dental Examiners for consideration and ruling on whether this is permissible under the Dental Laws of North Carolina.

**Interagency Committee for Dentistry.** On motion by Dr. Johnson, seconded by Dr. Breeland, the sum of \$300,000 is to be allocated in the 1972-73 budget to the Interagency Committee for Dentistry.

**Next Meeting.** By common consent the next meeting will be held at the Central Office in Raleigh, Saturday and Sunday, June 17-18, beginning at 2:00 p.m. on Saturday, June 17. The purpose of the meeting will be to review and approve the Guide-

lines for Peer Review recently submitted by the State Peer Review Committee.

**Draft of Minutes.** On motion by Dr. Culbreth, seconded by Dr. Harrell, a draft of the minutes of this meeting is to be forwarded to members of the Executive Committee, enclosing a card to be returned within 5 days indicating approval or disapproval.

**Adjournment.** There being no further business the meeting was adjourned on motion by Dr. Culbreth, seconded by Dr. Harrell.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## RALEIGH, NORTH CAROLINA

June 17, 1972

**Call to Order.** The Executive Committee convened at the Central Office, Raleigh, N. C., on Saturday, June 17, 1972. Dr. Frederick G. Hasty, chairman, called the meeting to order at 2:05 p.m. Dr. Robert B. Litton led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer.

Executive Committee members present: Frederick G. Hasty, chairman; William A. Current. It was noted that Wade H. Breeland had been hospitalized for surgery and could not be present. It was also noted that Fay H. Culbreth could not be present because of illness in his family.

Staff member present: Andrew M. Cunningham, executive secretary.

Others present: Robert J. Shankle, editor-publisher designate; James H. Lee, chairman, State Peer Review Committee; Glenn F. Bitler, president, N. C. Delta Dental Plans, Inc.

**Approval of Minutes.** On motion by Dr. Litton, seconded by Dr. Harrell, the minutes of May 17, 1972 were approved.

**Financial Report.** On motion by Dr. Current, seconded by Dr. Litton, the financial report indicating the status of Society funds as of May 31, 1972 was referred to the Finance Committee for review and study and report at the next meeting of the Executive Committee.

**N. C. Delta Dental Plans.** Dr. Glenn F. Bitler, president, N. C. Delta Dental Plans, Inc., reported that Mr. Ferris M. Hoggard, Jr., had accepted the position of executive director of the N. C. Delta Dental Plans, Inc., effective August 1, 1972. Since July 1962, Mr. Hoggard has been Chief, Dental Economics Section, Division of Dental Health, N.I.H., U. S. Department of Health, Education and Welfare. In this capacity he planned and developed prototype dental plans to meet the needs of specific population groups. From December, 1960 to July, 1962 he was on assignment from the Public Health Service as executive director of the Michigan Dental Service Corporation and was responsible for its organization, activation and operation. As its chief executive officer he designed, negotiated, and administered prepaid dental care contracts for consumer groups.

Dr. Bitler stated that N. C. Delta Dental Plans had established a line of credit in the amount of \$25,000 with First Citizens Bank and Trust Company of Raleigh.

Dr. Bitler noted that the Society had leased approximately 1,600 square feet of office space in the Meredith Woods Professional Center effective August 1, 1972. He pointed out that this was not sufficient space to include office facilities for N. C. Delta Dental Plans. He stated that N. C. Delta Dental Plans would initially require approximately 400 square feet of office space and emphasized that it would be advantageous for the Society and NCDDP to occupy adjacent quarters. He stated that Meredith Woods Professional Center had agreed to lease 2,000 square feet of office space in another area of the building which would permit the Society's Central Office to occupy 1,600 square feet and NCDDP to occupy 400 square feet adjacent to it. He fur-

ther stated that the lessor had agreed to cancel the lease previously signed by the Society.

Dr. Bitler recommended that the Executive Committee approve the above proposal. Dr. Harrell moved that Dr. Bitler's recommendation be approved with the provision that separate leases be negotiated by the Society and NCDDP for the space to be occupied by each. Dr. Current seconded the motion and it was carried.

**Appointment of Editor-Publisher.** It was made a matter of record that by mail ballot dated May 31, 1972 the Executive Committee unanimously approved the appointment of Dr. Robert J. Shankle as editor-publisher to succeed Dr. Benjamin R. Baker. It was noted that Dr. Baker had resigned from this post effective with the August, 1972 issue of *The Journal*.

**Request from 632nd Radar Squadron.** A communication was received from the 632nd Radar Squadron, Roanoke Rapids, stating its interest to obtain authorization from the Department of Defense to provide dental care to military dependents, and requesting a statement from the Society setting forth its position concerning the proposed authorization.

On motion by Dr. Johnson, seconded by Dr. Harrell, the request was referred to the Federal Dental Services Committee.

**Guidelines for Peer Review.** Dr. James H. Lee, chairman, State Peer Review Committee, presented a Peer Review Procedure Manual for consideration and approval by the Executive Committee. On motion by Dr. Harrell, seconded by Dr. Johnson, it was approved with minor corrections.

**Retirement of Dr. F. I. Spengler.** It was noted that Dr. F. I. Spengler who has served for the past several years as chief dental officer for the Veterans Administration in North Carolina had announced his retirement, effective June 30, 1972. Dr. Spillman moved that a letter be sent to Dr. Spengler expressing the thanks and gratitude of the Society for the fine services he rendered the dental profession in this state as chief of dental service for the Veterans Administration. Dr. Litton seconded the motion and it was carried.

**Report of NCBCBS Board Member.** Dr. Harrell reported that as president-elect of the Society he had recently been appointed as an ex-officio member of the N. C. Blue Cross and Blue Shield Board of Trustees and had attended his first meeting of the Board on May 24. The Board meets monthly and Dr. Harrell stated that he would keep the Executive Committee informed on actions by the Board concerning the dental profession.

**Next Meeting.** It was agreed that the next meeting of the Executive Committee would be held at 2:00 p.m. on Saturday, August 12 at Fox Fire in Southern Pines.

On motion by Dr. Harrell, seconded by Dr. Litton, Dr. C. W. Horton, chairman of the Dental Care Programs Committee, and Mr. Ferris M. Hoggard, Jr., newly-elected executive director, N. C. Delta Dental Plans, are to be invited to attend the meeting.

**Adjournment.** The meeting was adjourned at 5:15 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## PINEHURST, NORTH CAROLINA

August 11, 1972

**Call to Order.** The Executive Committee convened on Friday, August 11, 1972 at Fox Fire Country Club in Pinehurst. Dr. Frederick G. Hasty, chairman, called the meeting to order at 3:15 p.m. Dr. William A. Current led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, William A. Current.

Staff member present: Andrew M. Cunningham, executive secretary.

Others present: Charles W. Horton, chairman, Dental Care Programs Committee; and Ferris M. Hoggard, Jr., executive director, North Carolina Delta Dental Plans, Inc.

**Approval of Minutes.** The minutes of June 17, 1972 were approved on motion by Dr. Current, seconded by Dr. Breeland.

**Fiscal 1971-72 Audit.** On motion by Dr. Current seconded by Dr. Harrell, the audit of Society funds for fiscal 1971-72 prepared by Lynch, McMillan and Robertson was received for information.

**Financial Report July 31, 1972.** On motion by Dr. Harrell, seconded by Dr. Johnson, the financial report of the secretary-treasurer dated July 31, 1972 was received for information.

**Budget 1972-73.** On motion by Dr. Breeland, seconded by Dr. Harrell, a budget totalling \$93,950.00 for fiscal 1972-73 presented by the Finance Committee was approved. A copy is attached to these minutes.

The Finance Committee reported that proposals for a retirement program for Central Office employees were still being investigated.

**Journal.** Dr. Robert J. Shankle, editor-publisher, presented some ideas for improving the format and the readability of *The Journal*. He indicated that such changes would probably require additional funds to underwrite the project. Dr. Breeland moved that the editor-publisher prepare a cost study of the changes he would propose for the improvement of *The Journal* and submit it to the Finance Committee for consideration. Dr. Harrell seconded the motion and it was carried.

**Investment Portfolio.** On motion by Dr. Johnson, seconded by Dr. Harrell, the Finance Committee was directed to conduct a study of the investment of surplus money in the General Fund and that investment counsel be invited to appear before the Executive Committee to discuss and explain the method currently employed in the investment of surplus funds.

**Dental Service Plans Insurance Co.** A communication from the attorney for Dental Service Plans Insurance Co. was received advising that at the annual meeting of the shareholders of the company, on the recommendation of the Board of Directors, had approved a reduction of the par value of common shares of the company from \$40 to \$36 per share. The attorney emphasized that the change would not affect the value of the shares. It was noted that the Society now owned 83½ shares.

On motion by Dr. Johnson, seconded by Dr. Spillman, the secretary-treasurer was authorized to sign a waiver of notice approving the reduction in value of the shares of common stock in the Dental Service Plans Insurance Co. from \$40 to \$36 per share.

**Hot Springs Health Program.** By letter dated June 27, 1972 Dr. Fred N. Ogden, president of the First District Dental Society, advised the Executive Committee that the First District Dental Society approved the request of the Hot Springs Health Program that the National Health Service Corps provide a dentist and a dental assistant to implement its program to provide medical and dental care for the 5,000 residents of western Madison County.

On motion by Dr. Johnson, seconded by Dr. Spillman, the Executive Committee approved the request of the Hot Springs Health Program.

**Blue Ridge Opportunity Commission.** In a letter from the National Health Service Corps it was noted that the Blue Ridge Opportunity Commission had requested a dentist be assigned to a NHSC project in Ashe and Wilkes County. On motion by Dr. Breeland, seconded by Dr. Harrell, the request was referred to the Second District Dental Society for its consideration and recommendation.

**Medicaid Program.** Dr. Charles W. Horton, chairman, Dental Care Programs Committee, reported on the present status of

dental care benefits under the Medicaid program in North Carolina. In summary he stated:

(1) That efforts would be made to restore the program to provide the scope of dental services originally provided during the period January 1, 1970 to August 1, 1971 with certain modifications to be made by the Dental Care Programs Committee.

(2) That new regulations from Congress and HEW dictate that children under 21 years of age be given treatment under the Medicaid program by July 1, 1973.

(3) That efforts should begin immediately to work out a viable dental program with the Department of Social Services according to the resolution adopted by the 1972 House of Delegates. Failing this,

(4) That we should seek to have the new HEW regulations relating to the dental aspects of early periodic screening, diagnosis and treatment of individuals under 21 years of age implemented fully in addition to the present program.

(5) That further investigation as to whether the state had properly and legally reduced the scope of dental services under Medicaid be postponed until it can be ascertained if the Department of Social Services intended to restore recent cuts in the dental program or maintain the program as it is at the present time.

On motion by Dr. Spillman, seconded by Dr. Harrell, the Dental Care Programs Committee was authorized to negotiate a fixed fee schedule as a method of payment in the event that an acceptable level of usual, customary and reasonable fees cannot be maintained.

**Next Meeting.** The Committee agreed to meet next on October 8 at Four Seasons Holiday Inn, Greensboro, at 9:30 a.m.

**Adjournment.** The meeting was adjourned at 7:30 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## GREENSBORO, NORTH CAROLINA

October 8, 1972

**Call to Order.** The Executive Committee convened on Sunday, October 8, 1972, at Four Seasons Holiday Inn, Greensboro. Dr. Frederick G. Hasty, chairman, called the meeting to order at 9:30 a.m.

1. The minutes of August 11, 1972, were approved as mailed.  
2. Dr. Joseph M. Johnson moved that the financial statement received from Central Office be received for information. Dr. Current seconded and motion was passed.

3. Report of Don L. Henson, Investment Counsel—The operating funds and investment funds of the North Carolina Dental Society should be separated so as not to endanger the investment program. The operating funds could be placed in institutions such as savings and loans so that they would be readily available when needed. He stated that for the immediate needs a short-term loan might be preferable to selling of stock in a depressed market.

4. Dr. Current moved that the Executive Committee members be furnished monthly with financial reports showing costs of stocks and portfolio as well as their market value on the day submitted and also transactions made in the portfolio as they are made. Seconded by Dr. Harrell and passed.

5. Dr. Harrell, chairman of the Finance Committee, reported that the Central Office is to furnish to this committee information on expenses of the Society for the past three years. He also reported that recent stock transactions resulted in the loss of \$700. It was stated that the Finance Committee will give a report on a proposed dues increase at the District Officers Conference.

6. Dr. Johnson recommended that the Central Office furnish Dr. Henson with budgeting information as Dr. Henson stated that he would make any suggestions he felt pertinent after receiving such background information that would help in preparing a financial statement that would be more meaningful to the full membership. Dr. Horton stated that several non-recurring ex-

penses for legal assistance, dental practice act expenses, etc., had occurred. He recommended that the Finance Committee study such expenses over the last ten years to help in arriving at a proposed dues increase. Also, Dr. Henson recommended consideration be given to rebuilding the reserve fund as soon as possible to equal one year's budget.

7. Report on Insurance Programs and Action:

a. Dr. Nelson said that the Insurance Committee had voted to accept and implement all suggestions contained in Mr. Harvey Sarner's report. He presented them individually for Executive Committee action.

b. Accidental Death and Dismemberment. Dr. Breeland moved that this program be dropped. Dr. Current seconded and motion was passed.

c. In-Hospital Insurance. Dr. Spillman moved that the Executive Committee recommend retaining the In-Hospital Insurance with room benefits raise from \$40 to \$60 or higher and to drop In-Hospital option of the disability program. Dr. Litton seconded and motion was passed.

d. Professional Protector Plan. The recommendations in Sarner's summary of recommendations were received for information.

e. N. C. Blue Cross and Blue Shield Program. Dr. Nelson stated that Mr. Sarner generally favored the present program. At some future time as premiums become prohibited, deductible feature should be pursued. This was received for information. Dr. Breeland recommended that the Insurance Committee look into super major-medical coverage to add on to the extended coverage now offered by Blue Cross-Blue Shield.

f. Group Life Insurance Program. Dr. Harrell moved that the Insurance Committee look for a new carrier that has lower premium rates and a brochure that is less confusing. Dr. Litton seconded the motion and it was carried.

g. Dr. Harrell moved that the chairman of the Insurance Committee give a report to the Executive Secretary as soon as they have acted on the recommendations of the Executive Committee and that the Executive Secretary communicate these actions to the membership in the *Newsletter*. Dr. Breeland seconded the motion and it was passed.

h. Disability Program. Dr. Spillman moved that the Executive Committee recommend implementation by the Insurance Committee of the recommendations by Mr. Sarner. Dr. Harrell seconded the motion and it was passed.

i. Office Overhead. Dr. Breeland moved that the Executive Committee recommend that recent temporary rate reduction be made permanent by carrier. Dr. Current seconded and the motion was passed.

j. Promotion of Insurance Programs in General. The Executive Committee approved the recommendations made by Mr. Sarner.

k. Dr. Breeland moved that proposal for making dental students from North Carolina and all students at the UNC School of Dentistry be made eligible for insurance programs be referred by the Executive Secretary to the legal counsel that he work with the Constitution and Bylaws Committee to seek change in the *North Carolina Dental Society Constitution and Bylaws* to make this possible. Legal counsel should study the *ADA Constitution and Bylaws* to determine if this is possible now and if not consideration should be given to prepare a resolution to change the *ADA Bylaws*. If possible, above information should be made available to the Executive Committee at the time of the District Officers Conference. Dr. Johnson seconded the motion and it was passed.

l. Dr. Harrell moved that determination of charges made by the Central Office for services such as addressograph, etc., for insurance brokers, be referred to the Finance Committee. Dr. Litton seconded the motion and it was passed. The Executive Committee commended Dr. Nelson and members of the Insurance Committee for the excellence of the job they performed.

8. Reimbursement for Delegates and Alternate Delegates for the ADA Convention—Dr. Johnson moved that seven delegates and two alternates be approved for expenses to the ADA meeting at the previously approved level. Dr. Harrell seconded the motion and it was passed.

9. Dr. Johnson moved that the expenses for members attending the Fifth District Caucus in Atlanta be submitted to the Finance Committee for payment if money can be found in the current budget. Dr. Breeland seconded the motion and it was passed. The Executive Committee directed that the Executive Secretary send Dr. Coffey a copy of this motion.

10. Dr. Hasty directed the Executive Secretary to send all members of the Executive Committee a current copy of the *North Carolina Dental Society Constitution and Bylaws*.

11. A brief discussion of the Dental Practice Act change proposed by the Attorney General was given by Dr. Privette. It was recommended that this be considered at the meeting of the Executive Committee after the Interagency meeting on October 15.

12. Dr. Current moved that the president appoint a committee to study the executive structure of the North Carolina Dental Society and that the results of this study be presented to the next year's session of the House of Delegates. Dr. Spillman seconded the motion and it was passed.

13. Dr. Current moved that the Constitution and Bylaws Committee study means for making the editor-publisher a voting member of the Executive Committee. Dr. Harrell seconded the motion and it was passed.

14. Dr. Current moved that a letter be sent to the Director of the Intangibles Tax Division, State Department of Revenue, by the president of the North Carolina Dental Society protesting unfairness of the levying of intangibles tax on accounts receivable of professional accounts. Dr. Johnson seconded the motion and it was passed.

15. Dr. Horton reported that the Department of Social Services has no intentions of restoring the dental benefits under Title XIX to their previous level. Dr. Horton explained that only two avenues are open to restore these benefits—by legislative action and he said this is unlikely, or by action of the Board of the Department of Social Services. Dr. Horton reported that he plans to appear before the Board and that the help of any member of the North Carolina Dental Society will be appreciated.

16. Dr. Johnson moved that the Executive Secretary be directed to send Mr. Mednick a letter declining the services of the I.C. Systems Collection Service at this time.

17. The next Executive Committee meeting will be held at the Velvet Cloak in Raleigh, October 15, following the Interagency Meeting.

The meeting was adjourned.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## VELVET CLOAK INN—RALEIGH, NORTH CAROLINA October 15, 1972

**Call to Order.** The Executive Committee convened on Sunday, October 15, 1972, at the Velvet Cloak Inn, Raleigh, North Carolina.

Dr. Frederick G. Hasty presided. Others present: Drs. Wade H. Breeland, Robert B. Litton, William A. Current, J. Harry Spillman, Joseph M. Johnson, and James A. Harrell.

1. Dr. Harrell made a motion to make the Interagency Committee separate and independent from the North Carolina Dental Society and to state that it is not responsible to the North Carolina Dental Society and it is not a policy making committee and that the name be changed to the Dental Forum. The steering committee is to present at a later meeting a proposed Constitution and Bylaws and a method for election of officers of this Dental Forum. Dr. Current seconded the motion and it was passed.

2. Dr. Harrell moved that Dr. Ralph Young, chairman of the Preventive Dentistry Committee, be given authority to negotiate a contract between Dr. Frank Law and the North Carolina Dental Society, and that he begin to activate the various sources for the financing and that this be approved by the Executive Committee. Dr. Litton seconded the motion and it was passed.

3. Dr. Breeland moved that the president of the North Carolina Dental Society implement a meeting of the Attorney General with the attorneys of the North Carolina State Board of Dental Examiners, the University of North Carolina School of Dentistry, and the North Carolina Dental Society, relating to the exploration of the Dental Practice Act as pertains to research in the expanded duties of auxiliary personnel. Dr. Harrell seconded the motion and it was passed.

4. Dr. Shankle presented a cost of upgrading *The Journal of the North Carolina Dental Society*—a larger Journal with half the pages would cost approximately the same. The larger Journal with heavier paper and adding full color front, back and one other page would increase the cost about \$500 per issue, or \$1,500 per year. Dr. Current moved that the Executive Committee authorize the editor-publisher to produce the larger, heavier stock, full color issue for the January issue of *The Journal*. Dr. Harrell seconded the motion and it was passed.

5. Dr. Johnson moved that a letter be drafted by the Executive Secretary to Mr. Howison requesting that he obtain at the earliest possible date information on the make-up of committees that will study dental legislation, including the Joint Appropriations Committee, and that this information be made available to the Executive Secretary who will expeditiously disseminate this information to members of the Dental Care Programs Committee, members of the Preventive Dentistry Committee, and members of the Legislative Committee. Dr. Litton seconded and the motion passed.

6. The next meeting will be held December 9, 1972, at the Velvet Cloak Inn. Time to be announced later.

7. Dr. Harrell moved for adjournment. Dr. Johnson seconded and the motion passed.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## RALEIGH, NORTH CAROLINA December 9, 1972

**Call to Order.** The Executive Committee convened on Saturday, December 9, 1972, at Velvet Cloak Inn, Raleigh. Dr. Frederick G. Hasty, chairman, called the meeting to order at 9:25 a.m. Dr. Robert B. Litton led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, William A. Current.

Staff member present: Andrew M. Cunningham, executive secretary.

Others present: Glenn F. Bitler, president, and Ferris M. Hoggard, executive vice president, Delta Dental Plan of North Carolina, Inc.; Ralph D. Coffey, speaker, House of Delegates.

**Approval of Minutes.** On motion by Dr. Breeland, seconded by Dr. Litton, the minutes of October 8, 1972, were approved.

On motion by Dr. Breeland, seconded by Dr. Harrell, the minutes of October 15, 1972, as corrected were approved.

**Delta Dental Plan.** Dr. Glenn F. Bitler and Mr. Ferris M. Hoggard, Jr., executive vice president, North Carolina Delta Dental Plans, Inc., discussed with the committee the previous commitment of support of the Society to the Corporation. The conditions of the line of credit which the committee had extended May 17, 1972, were clarified.

A letter in support of North Carolina Delta Dental Plans from the Society to accompany the application of the Corporation to

the Insurance Commissioner for licensure was approved on motion by Dr. Spillman, seconded by Dr. Litton.

**1973 House of Delegates.** Dr. Current moved that the 1973 House of Delegates meet in Raleigh at Velvet Cloak Inn, March 31-April 1, 1973. Dr. Litton seconded the motion and it was carried.

**Reimbursement of ADA Delegates.** A report on the reimbursement of delegates and alternate delegates to the ADA meeting in San Francisco from Dr. Ralph D. Coffey, chairman of the delegation, was received for information on motion by Dr. Breeland, seconded by Dr. Litton.

Dr. Coffey recommended that the request for reimbursement submitted by Dr. Robert J. Shankle, editor-publisher, for attending the Editor's Conference and the ADA meeting in San Francisco be approved. On motion by Dr. Harrell, seconded by Dr. Breeland, the recommendation was approved.

On motion by Dr. Spillman seconded by Dr. Litton, reimbursement of delegates and alternates who attended the Fifth District Trustee caucus in Atlanta in September, 1972, was approved.

Dr. Current moved that the chairman of the ADA delegation submit his recommendations to the Executive Committee for future reimbursements to delegates and alternates for attendance at Fifth Trustee District caucuses and meetings of the ADA House of Delegates. Dr. Harrell seconded the motion and it was carried.

**Report of Finance Committee.** The following recommendations were submitted to the Executive Committee for its consideration by the Finance Committee, Dr. Spillman, chairman:

(1) That no further money from the General Fund be turned over to the Donald L. Henson Co. for investment as of this date;

(2) That under the direction of the secretary-treasurer and the executive secretary, all cash now on hand and all future income be deposited in commercial or savings and loan banks and U. S. Treasury notes drawing the highest interest rate available commensurate with accessibility to funds where needed;

(3) That all investments held by the Donald L. Henson Co. be liquidated and the proceeds be the nucleus of a reserve fund;

(4) That the Executive Committee recommend to the trustees of the Relief Fund that all investments of Relief Fund money held by the Donald L. Henson Co. be liquidated and that the proceeds be placed in insured securities such as commercial or savings and loan banks and U. S. Treasury notes.

Other members of the Finance Committee are: Drs. Harrell and Current.

The recommendations of the Finance Committee were approved on motion by Dr. Spillman, seconded by Dr. Harrell.

**Preventive Dentistry Committee.** A progress report of the Preventive Dentistry Committee submitted by Dr. Ralph A. Young, chairman, was approved on motion by Dr. Breeland, seconded by Dr. Harrell, with the recommendation that two seminars be scheduled.

**Preventive Dentistry Program.** Dr. Johnson reported that funds had been appropriated to support the activities of Dr. Frank Law in developing documentation of the Society's statewide preventive dentistry program. The project will be underwritten by grants from the Dental Foundation of N. C., Inc. and HEW, through the Dental Health Division of the State Board of Health.

**Expanded Function Auxiliaries.** Dr. Johnson reported that he had recently met with Mr. Harry W. McGalliard of the Attorney General's office to discuss with him the legality of moving the experimental practice which employs expanded function auxiliaries from the UNC Dental Research Center into selected private offices in the state. It was Mr. McGalliard's opinion that the State Board of Dental Examiners can legally authorize such activity if they choose to do so. However, he advised against such a decision under the present conditions of the law. It was his opinion that the provision in the law pertaining to

dental assistants and the duties which they may perform are unconstitutional and could be challenged in court.

After talking with Mr. McGalliard, Dr. Johnson concluded there were three alternatives:

- (1) Leave the law alone;
- (2) Re-write the law to permit experimental research on expanded duty auxiliaries outside of the dental school; or
- (3) Change the law to make it constitutionally sound.

Dr. Johnson moved that the Society explore ways and means to change the law to withstand constitutional attack within the spirit of the law as now written. Dr. Breeland seconded the motion and it was carried.

**Communication.** Dr. Spillman read a letter from Major General Roger Hombs, USAF, expressing his thanks for the hospitality extended to him and his wife by the North Carolina Dental Society at the ADA meeting in San Francisco. The letter was received for information.

**Next Meetings.** It was agreed that the committee would meet next at 11:00 a.m. on Saturday, January 6, at The Carolina in Pinehurst. A luncheon will be served at 1:00 p.m.

The committee will also meet at 9:30 a.m. on Sunday, January 7, at The Carolina to consider the report of the Annual Session Committee concerning its plans, program, and budget for the 117th Annual Session, May 13-16, 1973.

**Adjournment.** The meeting was adjourned at 12:40 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

#### PINEHURST, NORTH CAROLINA

January 6, 1973

**Call to Order.** The Executive Committee convened on Saturday, January 6, 1973 at The Carolina, Pinehurst, N. C. Dr. Frederick G. Hasty, chairman, called the meeting to order at 11:20 a.m. Dr. Fay H. Culbreth led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, Fay H. Culbreth, William A. Current.

Staff member present: Andrew M. Cunningham, executive secretary.

Others present: Charles W. Horton, James A. Privette.

**Approval of Minutes.** The minutes of December 9, 1972 were approved on motion by Dr. Litton, seconded by Dr. Breeland.

**Financial Report.** A report indicating that all investments of General Fund money with the Donald L. Henson Company had been liquidated as directed by the Executive Committee December 9, 1972 was received for information on motion by Dr. Breeland, seconded by Dr. Harrell.

**Blue Ridge Opportunity Commission Request.** Dr. Breeland moved that a request from Blue Ridge Opportunity Commission, Inc., for the assignment of National Health Service Corps personnel, including a dentist and a dental assistant, to Ashe County be approved, subject to the policy statement adopted by the Executive Committee May 17, 1972. Dr. Harrell seconded the motion and it was carried.

**Recommendations of D.O.C.** The recommendations of the 20th Annual District Officers Conference, December 9-10, 1972 were reviewed. A list of the nine (9) recommendations is attached. Action on each of the recommendations follow.

Recommendation 1. Amended and approved on motion by Dr. Breeland, seconded by Dr. Culbreth, to read as follows:

That the Central Office compile a directory of local dental societies, including officers and their addresses, and that

this information be included in the annual directory.

Recommendation 2. Amended and approved on motion by Dr. Johnson, seconded by Dr. Breeland to read as follows:  
That the Central Office prepare a "fact sheet" for newly licensed dentists to include information on how to obtain a narcotics license, privilege license, VA approval, procedure for joining the North Carolina Dental Society and the like.

Recommendation 3. Approved on motion by Dr. Culbreth, seconded by Dr. Litton.

Recommendation 4. Approved on motion by Dr. Harrell, seconded by Dr. Johnson.

Recommendations 5-9. Approved on motion by Dr. Breeland, seconded by Dr. Current.

**VA Fee Schedule.** On motion by Dr. Johnson, seconded by Dr. Culbreth, the Federal Dental Services Committee was authorized to negotiate and accept the best VA schedule possible.

**Distribution of Minutes.** Dr. Johnson moved that in the future the minutes of the Executive Committee be approved by mail ballot and then distributed to District Officers. The motion was seconded by Dr. Current and it was carried.

**Recess.** The Committee recessed for lunch at 12:35 p.m. and reconvened at 1:45 p.m.

**District Officers Conference.** Dr. Harrell moved that in the future more emphasis be placed on training of officers for their individual duties at the District Officers Conference and that the Manual for District Officers be updated and distributed to appropriate District Officers. Dr. Litton seconded the motion and it was carried.

**Medicaid.** Dr. Charles W. Horton, chairman, Dental Care Programs Committee, reported that the Department of Social Services had been requested to reinstate the dental care program under Title XIX to its original status prior to August 1, 1971, subject to the following modifications:

- (a) Provision of removable prosthesis when masticatory function is endangered, or when existing prosthesis is unserviceable, or in instances when esthetic considerations interfere with employment or social development;
- (b) That the dentist must certify that all teeth and supporting structures have been properly prepared to receive a removable prosthesis prior to insertion of same;
- (c) That no new full or partial dentures be provided for a period of three years after the original prosthesis is inserted except by prior approval for unusual conditions or circumstances;
- (d) That a co-payment of two dollars (\$2.00) per visit be required;
- (e) A return to payment of 100 per cent of usual, customary and reasonable fees since we are required to collect co-payment.

Dr. Horton stated that the above request had been approved by the Advisory Committee for Medical Assistance and the Board of Social Services.

On motion by Dr. Johnson, seconded by Dr. Spillman, the modifications in the Medicaid program requested by the Dental Care Programs Committee were approved.

**Peer Review.** Dr. Horton said that it had come to his attention that the Department of Social Services had been referring oral surgery cases for review directly to the N. C. Society of Oral Surgery, rather than to the State Peer Review Committee of the Society.

Dr. Spillman moved that the Dental Care Programs Committee by letter request the Department of Social Services to utilize the peer review mechanism of the N. C. Dental Society exclusively in all cases submitted for review. Dr. Current seconded the motion and it was carried.

**Adjournment.** The meeting was adjourned at 2:20 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

**BUDGET**  
**NORTH CAROLINA DENTAL SOCIETY**  
**Fiscal 1972-73**  
**Adopted by the Executive Committee August 11, 1972**

ESTIMATED INCOME	ESTIMATED INCOME 1972-73		ACTUAL INCOME 1971-72
	\$	Amount	
State Dues .....	\$	69,000.00	\$ 66,995.00
Annual Session .....		15,500.00	15,481.00
Publications			
Journal .....	\$	6,400.00	\$ 6,404.00
Directory .....		50.00	54.00
		6,450.00	6,458.00
Interest & Dividends			
Interest on Savings.....	\$	150.00	\$ 149.00
Interest on Bonds.....		875.00	875.00
Dividends on Stock.....		1,125.00	1,123.00
		2,150.00	2,147.00
Net Gain from Sale of Securities.....		—0—	4,622.00
Expense Reimbursement .....		850.00	839.00
TOTALS .....		\$ 93,950.00	\$ 96,542.00

**BUDGET**  
**NORTH CAROLINA DENTAL SOCIETY**  
**Fiscal 1972-73**  
**Adopted by the Executive Committee August 11, 1972**

EXPENSES	BUDGETED 1972-73		EXPENDED 1971-72
	\$	Amount	
Central Office Expense			
Salaries & Payroll Taxes.....	\$	36,275.00	\$ 35,863.00
Rent .....		7,750.00	6,996.00
Supplies .....		1,900.00	1,866.00
Office Machine Maint.....		600.00	600.00
Telephone .....		3,200.00	3,129.00
Postage .....		1,100.00	1,075.00
Travel—Executive Sec. ....		1,500.00	1,071.00
Hazard Insurance .....		170.00	169.00
City & County Taxes.....		130.00	120.00
Newspaper Service .....		220.00	228.00
Employee Insurance .....		825.00	816.00
Audit .....		500.00	475.00
Legal Counsel .....		1,500.00	2,374.00
Investment Counsel .....		450.00	584.00
Addressing Service .....		625.00	624.00
Miscellaneous .....		100.00	58.00
		\$ 56,845.00	\$ 56,048.00
Annual Session .....		12,000.00	12,145.00
Publications			
Journal .....	\$	7,100.00	\$ 7,010.00
Newsletter .....		2,500.00	2,466.00
Directory .....		1,100.00	1,026.00
		10,700.00	10,502.00
Committees & Conferences			
Dental Service Corp.....	\$	—0—	\$ 2,016.00
Peer Review .....		—0—	34.00
Dental Practice Act.....		500.00	2,596.00
District Officers Conf.....		375.00	361.00
Other .....		625.00	1,500.00
			5,007.00
Reimbursement of Officers, Delegates & Representatives to Conferences.....		10,000.00	6,347.00
Contributions .....		150.00	140.00
Memberships .....		750.00	757.00
Miscellaneous .....		150.00	155.00
TOTALS .....		\$ 92,095.00	\$ 91,101.00
Contingent Fund .....		1,855.00	
		\$ 93,950.00	

**RECOMMENDATIONS  
OF  
THE 20TH ANNUAL DISTRICT OFFICERS CONFERENCE  
December 9-10, 1972**

1. That the Central Office compile a directory of local dental societies, including officers and addresses and a listing of all dental study clubs, including addresses. This information to be included in the annual directory.

2. That the Central Office prepare a *fact sheet* for new members to include information on how to obtain a narcotics license, privilege license, VA approval and the like.

3. That manuals be distributed to the delegates and alternate delegates of the North Carolina House of Delegates and the ADA House of Delegates.

4. That a committee be immediately appointed to be known as the Committee on Continuing Education for the State of North Carolina and that it be charged with the following responsibilities:

- (1) To set forth the objectives of continuing education;
- (2) To define what constitutes an acceptable program;
- (3) To set forth the guidelines and mechanisms necessary to implement a Continuing Education Program for all licensed dentists in this state.

This committee will consist of at least one representative from: The North Carolina Dental Society

The UNC School of Dentistry

The State Board of Dental Examiners

The Dental Foundation of North Carolina, Inc.

The Dental Health Division of the State Board of Health

The Old North State Dental Society

The leaders of the foregoing groups shall be requested to immediately appoint their representative (s) to this committee.

The committee shall elect its own chairman and secretary.

It is hoped and anticipated that the Dental Foundation of North Carolina, Inc. will underwrite any deficit incurred by this committee during the first year.

5. That the Society attempt to develop the best dental Journal of any state society.

6. That the Society become non-dependent upon the support of advertisements for the production of the *North Carolina Dental Journal*.

7. That the Journal:

- a. Promote the State of North Carolina as well as the dental profession.
- b. Include scientific articles.
- c. Include humanistic articles.
- d. Be used as a forum to discuss problems of the profession.
- e. Be used as a medium to support our profession and promote the health of the people of North Carolina.

8. That means be explored to make students of the School of Dentistry affiliate members in the North Carolina Dental Society and provide them with copies of each issue of the Journal.

9. That the Districts be encouraged to appoint or elect Editors to serve more than a one-year term to promote continuity in the development of the *North Carolina Dental Journal*.

**PINEHURST, NORTH CAROLINA**

**January 7, 1973**

**Call to Order.** The Executive Committee convened in joint session with the Annual Session Committee at The Carolina, Pinehurst, N. C., Sunday, January 7, 1973. President Joseph M. Johnson presided and called the meeting to order at 9:40 a.m. Dr. James A. Privette led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, Fay H. Culbreth, William A. Current.

Annual Session Committee members present: Darden J. Eure, Jr., general chairman; Jon W. Couch, arrangements; T. Hicks Hamrick, auxiliary; Charles M. Kisler, exhibits; Mitchell W. Wallace, entertainment; James A. Privette, projected clinics.

Staff member present: Andrew M. Cunningham, executive secretary.

Others present: Charles W. Horton.

**Report of Annual Session Committee.** Dr. Johnson introduced Dr. Darden J. Eure, Jr., general chairman, Annual Session Committee, who presented the report of the Annual Session Committee and a budget request of \$12,448.00 for the 117th Annual Session. It was noted that this was \$448.00 over the \$12,000.00 allocated in the 1972-73 budget approved by the Executive Committee August 11, 1972.

Dr. Johnson thanked Dr. Eure and the members of his committee for an excellent report, and declared the Executive Committee in executive session.

**Approval of Annual Session Budget.** On motion by Dr. Breeland, seconded by Dr. Litton, the report and budget request of the Annual Session Committee totalling \$12,448.00 was approved and \$448.00 was allocated from the Contingent Fund to the Annual Session Committee. It was noted that the Contingent Fund totalled \$1,885.00 and that this would leave a balance in the fund of \$1,437.00. A copy of the 1973 Annual Session Budget is attached to these minutes.

**Next Meeting.** It was agreed that the next meeting of the Executive Committee would be held Friday, March 30, 1973, at 8:00 p.m. at Velvet Cloak Inn, Raleigh, just prior to the convening of the House of Delegates.

**Adjournment.** The meeting was adjourned at 10:35 a.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

**RALEIGH, NORTH CAROLINA**

**February 17, 1973**

**Call to Order.** The Executive Committee convened on Saturday, February 17, 1973, at the Central Office in Raleigh. Dr. Frederick G. Hasty, chairman, called the meeting to order at 3:15 p.m. Dr. Fay H. Culbreth led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; J. Harry Spillman, secretary-treasurer; Robert J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Fay H. Culbreth, William A. Current.

Staff member present: Andrew M. Cunningham, executive secretary; Robert C. Howison, Jr., legal counsel.

Preventive Dentistry Committee members: Ralph A. Young, chairman, M. W. Aldridge, Carle W. Mason, Jr., J. Fred Sproul.

Others present: William E. Kidd, Walter S. Linville, Jr., Charles W. Horton, W. L. Hand, Jr.

**Preventive Dentistry Program.** Following an open hearing on the Preventive Dentistry Program by Dr. Frank E. Law, the following action was taken:

Dr. Harrell moved that the Preventive Dentistry Program prepared by Dr. Frank E. Law be approved with the deletion of paragraph 2 on page 3. Dr. Spillman seconded the motion and it was carried.

**Approval of Minutes.** It was made a matter of record that the minutes of January 6, 1973 and January 7, 1973 were unanimously approved by mail ballot.

**Financial Report.** The financial report of the secretary-treasurer dated January 31, 1973 was approved for information.

Mr. Cunningham reported that with the change in format of the JOURNAL the January issue cost \$4,000.00 and he estimated that the April issue would probably cost in excess of \$3,000.00. On this basis he estimated that for fiscal 1972-73 the total cost of the JOURNAL would probably be \$11,000.00 plus. He noted that \$7,100 had been budgeted.

Dr. Shankle explained that the change-over to the new format required unusual expenditures for engravings for the initial issue which would not be necessary for future issues.

**Dues Increase.** Dr. Spillman moved that the Executive Committee submit a resolution to the House of Delegates amending the *Bylaws* to provide a \$10.00 increase in annual dues. Dr. Harrell seconded the motion and it was carried.

**Honorary Membership.** Dr. Johnson moved that Dr. C. Gordon Watson, executive director, American Dental Association, be recommended to the House of Delegates for honorary membership in the Society. Dr. Current seconded the motion and it was carried.

**Salaries of State Employed Dentists.** Letters were received from Western Carolina Center and the Dental Health Division of the State Board of Health citing inequities in the salaries and job classifications of dentists and physicians employed by the state.

On motion by Dr. Johnson, seconded by Dr. Harrell, the President was authorized to direct letters to appropriate state agencies urging that job classifications and salaries of dentists and physicians be re-evaluated to the end that the salaries of dentists be up-graded to equal salaries of physicians in similar job classifications.

**Next Meeting:** Dr. Johnson announced that he had received a report from the Long Range Planning Committee containing several recommendations which would require consideration by the Executive Committee before the House of Delegates convened. It was agreed that the next meeting would be held at the Central Office on Sunday, March 4 at 2:00 p.m.

**Adjournment.** The meeting was adjourned at 7:10 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## RALEIGH, NORTH CAROLINA

March 4, 1973

**Call to Order.** The Executive Committee convened at the Central Office in Raleigh on Sunday, March 4, 1973. Dr. Frederick G. Hasty called the meeting to order at 2:20 p.m. Dr. Harrell led in prayer.

**Roll Call.** Others present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer.

Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, Fay H. Culbreth, William A. Current.

Staff present: Andrew M. Cunningham, executive secretary. Others present: Charles W. Horton, James A. Privette.

**Approval of Minutes.** The minutes of February 17, 1973 were approved on motion by Dr. Johnson, seconded by Dr. Breeland.

**Report of Long Range Planning Committee.** The report of the Long Range Planning Committee was carefully reviewed and studied. The actions taken on the recommendations follow:

1. The committee recommended that every graduate of the UNC School of Dentistry receive a planned program of orientation on "the aims, goals, purpose, and obligations of membership in organized dentistry." Mr. Cunningham reported that this is now being done in cooperation with the Department of Community Dentistry at UNC.

2. The committee made three recommendations on the implementation of a program to secure membership of all dentists practicing in North Carolina. On motion by Dr. Harrell, seconded by Dr. Breeland, the following resolution is to be presented to the House of Delegates:

**Resolved,** that District Vice Presidents be urged to make a concerted effort to secure membership of all dentists licensed to practice in North Carolina.

3. The committee recommended that a resume of the Report of the ADA Delegates be published in the *Newsletter* or any

other appropriate medium. On motion by Dr. Harrell, seconded by Dr. Litton, the following resolution is to be presented to the House of Delegates:

**Resolved,** that a resume of the Report of the ADA Delegates be published in the *Newsletter* or any other appropriate medium, and be it further

**Resolved,** that the report include an outline of assigned or implied duties of each delegate and the effectiveness and functioning of each delegate.

4. The committee recommended that the office of Editor-Publisher be made an elective office. On motion by Dr. Johnson, seconded by Dr. Breeland, the Executive Committee went on record opposing this recommendation on the grounds that it would impair the effectiveness of the Editor-Publisher as a free voice.

5. The committee recommended that the President should report to the House of Delegates the final disposition of all resolutions adopted by the preceding House of Delegates. This recommendation was received for information on motion by Dr. Johnson, seconded by Dr. Harrell.

6. The committee recommended that District Ethics Committees be responsible for establishing grievance committees. The Executive Committee concluded that grievances of patients did not come within the purview of Ethics Committees unless a matter of ethics was involved. On motion by Dr. Breeland, seconded by Dr. Harrell, the Professional Relations Committee on the state level is to be urged to establish similar committees on the local level, but not restricted by district boundaries, to handle complaints not involving ethics or violations of dental laws.

7. The committee recommended that the tenure of members of the State Board of Dental Examiners be limited to two successive terms. The recommendation was disapproved on motion by Dr. Current, seconded by Dr. Harrell.

On motion by Dr. Johnson, seconded by Dr. Harrell, the following resolution is to be presented to the House of Delegates:

**Resolved,** that nominations for members of the State Board of Dental Examiners be made at the second General Session during the Annual Meeting of the Society with the understanding that this would not preclude further nominations as provided under State law.

8. The committee recommended the registration of all dental laboratories in North Carolina with the State Board of Dental Examiners. This recommendation was disapproved on motion by Dr. Breeland, seconded by Dr. Litton.

On motion by Dr. Breeland, seconded by Dr. Harrell, the following resolution is to be presented to the House of Delegates:

**Resolved,** that the Dental Laboratory Relations Committee, in consultation with the North Carolina Dental Laboratory Association, develop a mechanism for the registration of dental laboratories in this State, and be it further

**Resolved,** that this mechanism be submitted to the House of Delegates for approval.

9. The committee recommended that changes in the Dental Practice Act be sought to "allow research, investigation and experimentation to be conducted under competent leadership and supervision" in the use of expanded duty auxiliaries. The recommendation was received for information on motion by Dr. Johnson, seconded by Dr. Harrell.

On motion by Dr. Johnson, seconded by Dr. Harrell, the following resolution is to be presented to the House of Delegates:

**Resolved,** that avenues, other than changes in the Dental Practice Act, be explored to allow research, investigation and experimentation in the use of expanded duty auxiliaries, and be it further

**Resolved,** that the UNC School of Dentistry be encouraged to consider following the plan for the training of expanded duty auxiliaries currently existing in the State of Virginia.

10. The committee recommended that all limited practitioners be listed in the NCDS Directory. This recommendation was approved on motion by Dr. Harrell, seconded by Dr. Litton.

11. The committee recommended "that the Executive Committee establish a committee for the purpose of acquiring photographs of all members of the NCDS for inclusion in the NCDS Directory. On motion by Dr. Harrell, seconded by Dr. Litton, this recommendation was disapproved.

12. The committee stated that "it views with favor the Preventive Dentistry Program for North Carolina and urges its immediate implementation." On motion by Dr. Breeland, seconded by Dr. Litton, the Executive Committee reaffirmed its support of the Preventive Dentistry Program and the implementation of the program as soon as possible.

13. The committee recommended that every effort should be made to secure dental representation on all boards and/or committees of government agencies on local, state and national levels. This recommendation was approved on motion by Dr. Current, seconded by Dr. Litton.

**Adjournment.** The meeting was adjourned at 5:00 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

#### RALEIGH, NORTH CAROLINA

March 30, 1973

**Call to Order.** The Executive Committee convened at Velvet Cloak Inn in Raleigh, Friday, March 30, 1973. Dr. Frederick G. Hasty, chairman, called the meeting to order at 8:30 p.m. Dr. James A. Privette led in prayer.

**Roll Call.** Officers present: Joseph M. Johnson, president; James A. Harrell, president-elect; Robert B. Litton, vice president; J. Harry Spillman, secretary-treasurer; R. J. Shankle, editor-publisher.

Executive Committee members present: Frederick G. Hasty, chairman; Wade H. Breeland, William A. Current.

Staff present: Andrew M. Cunningham, executive secretary.

Others present: James A. Privette, C. W. Horton, Ralph D. Coffey, R. B. Barden.

**Approval of Minutes.** On motion by Dr. Harrell, seconded by Dr. Spillman, the minutes of March 4, 1973 were approved.

**Financial Report.** The report of the Secretary-Treasurer dated February 28, 1973 was received for information on motion by Dr. Breeland, seconded by Dr. Johnson.

**Dental Care for Military Dependents.** A letter was received from five dentists in the Roanoke-Weldon area voicing their opposition to that area being declared remote for purpose of providing dental care to military dependents. The letter was referred to the Federal Dental Services Committee on motion by Dr. Breeland, seconded by Dr. Spillman.

**Review of Resolutions and Reports.** The reports and resolutions submitted to the House of Delegates for consideration were reviewed and discussed with Dr. Ralph D. Coffey, Speaker of the House.

On motion by Dr. Breeland, seconded by Dr. Harrell, the action by the Committee on February 17, 1973 approving a \$10.00 increase in annual dues was rescinded and the Committee approved the introduction of a resolution in the House of Delegates amending the *Bylaws* to provide for a \$20.00 increase in annual dues.

On motion by Dr. Harrell, seconded by Dr. Litton, Dr. Johnson was authorized to introduce in the House of Delegates a resolution in tribute to Dr. James W. Bawden, Dean of the University of North Carolina School of Dentistry for his dedication and leadership.

**Adjournment.** The meeting was adjourned at 10:35 p.m.

J. HARRY SPILLMAN, D.D.S.  
Secretary-Treasurer

## Committee Reports

### ANNUAL SESSION COMMITTEE

*General Chairman*—DARDEN J. EURE, JR.

JON W. COUCH                    RICHARD P. BELTON  
DONALD D. CULP                KEITH L. BENTLEY

**Meetings.** The Annual Session Committee met January 6, 1973. On January 7, 1973, the Committee met jointly with the Executive Committee in order to review the proposed budget and agenda for the May 13-16, 1973 Annual Meeting. These meetings were held at the Carolina in Pinehurst.

**Budget.** A total budget of \$12,448.00 for the 1973 Annual Session was approved by the Executive Committee on January 7, 1973.

**Arrangements.** This Committee has completed arrangements in cooperation with the Central Office for the Annual Session including: housing, assignment of meeting rooms, properties for essayists, employment of a stenotypist, registration, presentations and printing of hand programs. This Committee will provide floor managers for all activities. An appropriation of \$3,790.00 has been approved. Dr. Jon W. Couch is chairman.

**Projected Clinics.** Projected clinics will be presented on Wednesday, May 16, at 9:30 a.m. No appropriations requested. Dr. James A. Privette is chairman.

**Commercial Exhibits.** A floor plan has been designed with the help of the Central Office to accommodate 88 exhibit spaces. Last year we had 84 exhibit spaces. It is anticipated that all 88 booths will be sold which will yield \$16,265.00 in revenue. Door prizes will be given at a drawing following the 3rd General

Session on Wednesday, May 16. The Society will host a social hour for the commercial exhibitors at 5:00 p.m. on Monday, May 14. An appropriation of \$2,170.00 has been approved. Dr. Charles M. Kistler is chairman.

**Entertainment.** The total allocation to the Entertainment Committee is \$2,525.00 as follows:

Banquet .....	\$ 75.00
Dance & Entertainment.....	500.00
Social Hour (Sunday).....	600.00
Reception (Tuesday) .....	600.00
Decorations, corsages & miscellaneous.....	450.00
Dance set-ups .....	300.00
	\$2,525.00

There will be a social hour on Sunday, May 13 at 5:30 p.m. The annual banquet will be held Tuesday, May 15 at 7:00 p.m. The reception honoring members and new members will be held at 5:30 p.m. Tuesday, May 15. The entertainment and dance will be held Tuesday, May 15 beginning at 9:00 p.m. Dr. Mitchell W. Wallace is in charge of the entertainment and dance and Dr. Robert H. Watson is in charge of the banquet.

**Monitor.** Monitors will be assigned to all scientific sessions and general sessions. No appropriations were requested. Dr. Richard P. Belton is chairman.

**Program.** Four nationally known clinicians have been invited for the scientific programs. They are: Dr. Harold R. Stanley of Gainesville, Florida; Dr. Frank B. Trice of Houston, Texas;

and Drs. Marvin M. and Edward F. Sugarman of Atlanta, Georgia.

The program will deal with pulp histology, clinical periodontics and clinical endodontics. An appropriation of \$2,918.00 has been approved. Dr. Donald D. Culp is chairman.

**Publicity.** A professional journalist has been employed to prepare pre-convention publicity and to release stories to the wire services from Pinehurst during the meeting. An appropriation of \$385.00 has been approved. Dr. L. P. Megginson, Jr. is chairman.

**Sports.** The annual NCDS Golf Tournament will be held at the Pinehurst Country Club on Sunday, May 13. Entrance fees are

expected to cover the cost of operating the Tournament and no appropriation was requested. Dr. John H. Dixon is chairman.

**House of Delegates.** An appropriation of \$610.00 has been approved for the House of Delegates which will convene March 31 at the Velvet Cloak Inn, Raleigh. This will cover preparation, publication and mailing of the Blue Book, the services of a stenotypist, a social hour and other miscellaneous items incidental to the operation of the House of Delegates.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

### 1973 ANNUAL SESSION BUDGET

Approved by the Executive Committee January 7, 1973

Arrangements .....	\$	3,790.00
Clinics, Projected .....	—0—	
Entertainment		
Banquet .....	\$	175.00
Dance and Entertainment		
Floor show and band.....	\$	500.00
Cabaret set-ups .....		300.00
		800.00
Receptions		
Sunday .....	\$	600.00
Tuesday .....		600.00
Decorations .....		200.00
Corsages .....		150.00
		1,550.00
		2,525.00
Exhibits .....		2,170.00
Monitor .....	—0—	
Program .....		2,918.00
Publicity .....		385.00
Sports .....	—0—	
House of Delegates.....		610.00
Necrology (flowers) .....		50.00
		\$ 12,448.00

### CONSTITUTION AND BYLAWS COMMITTEE

WILLIAM G. SCHNEIDER (1977), *Chairman*

G. SHUFORD ABERNETHY THOMAS G. NISBET

(1973) (1975)

CHARLES A. REAP, JR. CHARLES P. GODWIN

(1974) (1976)

**Meetings.** The Committee met February 25, 1973 at the Central Office.

**Assignments.** Two resolutions (25-1972-H and 27-1972-H) were referred to the Committee by the 1972 House of Delegates. In addition, three motions adopted by the Executive Committee October 8, 1972 were also referred to this Committee.

**Dental Education Committee.** The 1972 House of Delegates referred the following resolution to the Constitution and Bylaws Committee:

**25-1972-H. Resolved,** that the Dental Education Committee be enlarged in membership to include two members from the immediate area of each school and one at large to serve as chairman. This committee then should assume the responsibility of obtaining a detailed report from each school, study each program in detail and subsequently submit an annual report to the House of Delegates with an evaluation of the effectiveness of each program.

After studying the scope and noting the importance of the detailed reports of the Dental Education Committee, the Constitution and Bylaws Committee feels that to enlarge this committee would make it unwieldy in size and consequently less efficient. However, the need for additional individual services

to obtain detailed reports from each school since they are increasing in number and are geographically scattered throughout the state, is easily recognized. To accomplish this goal and maintain efficiency, the subcommittee mechanism is recommended whereby the chairman of the Dental Education Committee could, if need be, appoint a subcommittee for each school to study and provide the required information. All reports would be submitted to the parent committee for review.

An appropriate resolution appears at the end of this report.

**Subcommittee on Cancer.** The 1972 House of Delegates referred the following resolution to the Constitution and Bylaws Committee:

**27-1972-H. Resolved,** that the Cancer Subcommittee of the North Carolina Dental Society be made a standing committee and carry out the recommendations submitted in this report.

There has been a tendency to increase the number of standing committees because of the increasing complexity of avenues that need attention and supervision in dentistry. Efficient transmission and coordination of information is paramount as this complexity increases and it is felt that this can best be accomplished through a parent standing committee and subcommittee structure, which in no sense minimizes the importance of subcommittee duties.

An example of this can be found in the Dental Care Programs Committee with five subcommittees. It is our feeling that stronger capabilities will be realized with standing committees covering broad spectrums and delegating the many avenues to subcommittee structure.

An appropriate resolution appears at the end of this report.

**Student Membership.** At its October 8, 1972 meeting the Executive Committee requested the Constitution and Bylaws Committee to prepare amendments to the *Constitution and Bylaws* to provide for student membership in the Society. This would present an opportunity to indoctrinate dental students in the philosophy and advantages of actively participating in organized dentistry. Further, students could receive the *NORTH CAROLINA DENTAL JOURNAL*, be privileged to attend scientific meetings of the Society and participate in appropriate group insurance programs.

The Committee is heartily in favor of this proposal and an appropriate resolution appears at the end of this report.

**Executive Structure.** At its October 8, 1972 meeting the Executive Committee requested the Constitution and Bylaws Committee to study the executive structure of the Society.

After a careful review of the duties of officers as stated in the *Constitution and Bylaws*, the Committee concluded that a change in the succession of officers in the event of a vacancy should be made, specifically to provide that the president-elect assume the office of president if a vacancy in that office should occur. The Committee agreed that while the change is not intended to minimize the office of vice president, the president-elect was the logical successor to the president's office in the event of a vacancy and an appropriate resolution appears at the end of this report.

The Committee feels strongly that the president should delegate specific duties to the Vice President in order to make that office more effective and meaningful. With imagination and careful planning a president can make his job less demanding by proper and effective utilization of his vice president.

**Editor-Publisher.** At its October 8, 1972 meeting the Executive Committee also requested the Constitution and Bylaws Committee to "study ways and means for making the editor-publisher a voting member of the Executive Committee."

After careful study and consultations with the current editor-publisher the Committee concluded that the editor-publisher should continue as an ex officio member of the Executive Committee without the privilege of vote, if for no other reason than this would jeopardize the editor-publisher's freedom to editorialize as he judged necessary in the interest of the Society membership. The Committee agreed that for the editor-publisher to become a member of the Executive Committee with the privilege of vote would interfere with, if not stifle, his responsibility to speak out clearly and effectively on all issues without prejudice.

#### Resolutions

**8. Resolved,** that resolution 25-1972-H be postponed indefinitely.

**9. Resolved,** that resolution 27-1972-H be postponed indefinitely.

**10. Resolved,** that Section 1 of Article III of the *Constitution* be deleted and the following substituted therefor:

**Section 1.** The membership of this Society shall consist of the following classifications:

Active members, life members, Student members, Honorary members, and Retired members

and be it further

**Resolved,** that Article III of the *Constitution* be amended by the addition of the following section:

**Section 4.** A resident of North Carolina who is an undergraduate of a dental school accredited by the American Dental Association, and any undergraduate dental student at the University of North Carolina shall be eligible for student membership in the Society, provided he is a student member of the American Dental Association.

and be it further

**Resolved,** that Article V of the *Bylaws* be amended by the addition of the following section:

**Section 4.** Student members shall receive annually the NORTH

*CAROLINA DENTAL JOURNAL*, the price of which shall be included in their annual dues. They shall be entitled to attend all meetings of the Society, but they shall not be eligible for office or privileged to vote.

and be it further

**Resolved,** That Article VI of the *Bylaws* be amended by the addition of the following section:

**Section 9.** The annual dues of student members of this Society shall be four dollars (\$4.00).

**11. Resolved,** that Section 6 of Article I of the *Bylaws* be deleted and the following substituted therefor:

**Section 6.** In the event the office of President becomes vacant, the President-Elect shall become President for the unexpired portion of the term, after which he shall serve a full term as President. In the event both the offices of President and President-Elect becomes vacant, the Vice President shall become President for the unexpired portion of the term. In the event the office of President-Elect becomes vacant, the President for the ensuing year shall be elected at the next annual session of the Society in accordance with Chapter IV of the *Bylaws*. A vacancy in the office of Vice President or in the office of Secretary-Treasurer shall be filled for the unexpired portion of the term by a majority vote of the Executive Committee.

#### DENTAL CARE PROGRAM COMMITTEE

CHARLES W. HORTON, *Chairman*

GEORGE G. DUDNEY                           WALTER S. LINVILLE, JR.  
JOHN W. GIRARD, JR.                       JAMES A. HARRELL  
JAMES H. LEE                                 D. W. SEIFERT, JR.

WILLIAM G. WARE, JR.

**Meetings.** The committee held a meeting on November 30, 1972. Meetings were held with State officials on September 1, 1972, December 4, December 6, 1972 and January 24, 1973.

**Assignments.** The 1972 House of Delegates adopted the following resolution:

"Resolved, that the North Carolina Dental Society strongly urge the N. C. General Assembly to reinstate the Title XIX (Medicaid) program insofar as the dental program is concerned to its original status prior to August 1, 1971 subject to the following: (1) Further modifications as recommended by the Dental Care Programs Committee of the North Carolina Dental Society and approved by the Executive Committee of the North Carolina Dental Society."

**Committee Decisions.** The Dental Care Programs Committee met on November 30, 1972. The following decisions were made: (1) To continue efforts to have the State Agencies Fee Schedule revised. The last revision of fees for that agency was in 1967, (2) To continue efforts to improve the peer review mechanism, (3) To update the Industrial Commission Fee Schedule. No problems were anticipated, (4) To dissolve the Blue Cross—Blue Shield Committee since its function is contrary to State Dental Society policies, (5) To compare and submit to the Governor, Lieutenant Governor, and each member of the General Assembly an advisory opinion concerning the Medicaid Dental Program, (6) To make every possible effort to influence the Board of Social Services and the General Assembly to restore cuts made in Title XIX dental care, and to insist on implementation of H.R.-1 requirements for Dental Care of individuals up to age 21.

**Resume of Activities.** The chairman met with Commissioner Clifton Craig, Deputy Commissioner Robert Ward, Budget Director Emmett Sellers of the Department of Social Services on September 1, 1972. During the course of discussion it was learned that the Department of Social Services had no plans to recommend restoration of the cuts in the Dental Program in their operating budget since this was not presently the policy of the Board of Social Services. The Commissioner suggested that the

Dental Society should attempt to have the Board of Social Services recommend restoration of the cuts to the General Assembly, and include the necessary monies in its budget recommendations to the Advisory Budget Commission.

An opportunity to appear before the Board of Social Services was immediately requested and permission to appear was received.

On December 4, 1972, a presentation was made to the Advisory Committee for Medical Assistance to the Board of Social Services. It recommended implementation of the original dental program.

On December 6, 1972, a presentation was made to the Board of Social Services and the Board voted to restore the cuts in the dental program and recommended implementation of H.R.-1 dental requirements for individuals up to age 21. Following are the exact recommendations of the Dental Care Programs Committee as approved by the State Society Executive Committee and the North Carolina Board of Social Services: (1) That the dental provisions of H.E.W. Regulations of Health Screening, Diagnosis, and Treatment of individuals up to age 21, be fully implemented as of July 1, 1973. These services are described in a bulletin to Associate and Regional Commissioners dated December 13, 1971 and more recently, June 28, 1972, and entitled Field Staff Information and Instruction, series No. 8. (2) That the dental programs under Title XIX be reinstated to its original status prior to August 1, 1971 subject to the following modifications:

- a. Provision of removable prosthesis when masticatory function is endangered, or when existing prosthesis is unserviceable, or in instances when esthetic considerations interfere with employment or social development.
- b. That the dentist must certify that all teeth and supporting structures have been properly prepared to receive a removable prosthesis to insertion of same.
- c. That no new full or partial dentures be provided for a patient for a period of three years after the original prosthesis is inserted except by prior approval for unusual conditions or circumstances.
- d. That a co-payment of \$2.00 per visit be required.
- e. A return to payment of 100 per cent of usual, customary and reasonable fees.

An advisory opinion prepared by the Dental Care Programs Committee to the Governor, Lieutenant Governor, and members of the General Assembly was distributed by the Central Office.

Replies from the Lieutenant Governor and members of the General Assembly to date indicate the paper was well received and have either been favorable, or that a high priority will be given to the dental program with respect to other budgetary considerations.

The chairman has been instructed to appear before committees of the legislature when hearings are held.

On January 24, 1973, the President, President-Elect, and the Chairman of the Dental Care Programs Committee had a meeting with the new Secretary of the Department of Human Resources, David Flaherty, and Assistant Secretary, William Henderson. The Department wished the dental society to know that our opinions were valued by the Department and that the Department wished to cooperate with the profession whenever possible.

The Department also wishes to establish one central agency where providers of services may deal with State Government to establish a single fee schedule applicable to all state funded health care programs.

The chairman of the Dental Care Programs Committee by way of a telephone conversation from Assistant Secretary Henderson, has learned that full funding for the Medicaid Program will be submitted to the Governor's Advisory Budget Commission at a very early date.

Every possible effort to restore the Medicaid Program to its original dimensions has been made. The Society will probably learn the results of its effort in the closing days of the legislature. Continuing meetings with Legislative Committees will be

necessary to obtain the necessary support to assure the restoration of the Medicaid Dental Program if this is possible.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

### DENTAL CARE PROGRAMS COMMITTEE

#### Subcommittee on State Agencies

WALTER S. LINVILLE, JR., *chairman*  
WILLIAM E. KIDD JAMES L. COX  
JAMES A. PRIVETTE

**Meetings.** The committee held a meeting in Raleigh on Monday, February 19 with representatives of the Department of Human Resources.

**Assignments.** The committee continued the work of last year's committee. The 1971 House of Delegates adopted the following resolution (Trans. 1971, Page 72, 16-1971-H):

**Resolved,** that the Dental Care Programs Committee be requested to review the 1967 State Agencies Dental Fee Schedule, and negotiate with appropriate state agency for a revision of fees equal to or greater than the level of those fees established by the State Industrial Commission Fee Schedule.

**Results of Committee Work.** The committee has tried since their appointment to meet with appropriate powers in Raleigh. No persons or agencies were willing to talk with us. Recently the Department of Human Resources under a new head has come forward as the responsible party.

Mr. Ben Aiken, Mr. Bill Henderson and Mr. Roy Holley have demonstrated what we believe to be a sincere desire to work with the dentist. As a result we should have some standardization of state programs and an increase in fees.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

### DENTAL CARE PROGRAMS COMMITTEE

#### Subcommittee on Blue Shield

JAMES A. HARRELL, *chairman*  
HARRY N. BALDWIN FRANK H. WALKER  
JOSEPH E. CAMPBELL W. STEWART PEERY

**Meetings.** None.

**Assignments.** None.

In recent years, the Blue Shield Committee has had no reason for any activity. It is felt that this committee is contrary to the Society's policy of not showing favoritism to any Insurance Company or third party carrier—other than our own Dental Service Corporation. The Dental Care Programs Committee voted to do away with this Subcommittee, feeling that it no longer had a place in the committee structure.

#### Resolution

**6. Resolved,** that the Blue Shield Subcommittee be eliminated.

### DENTAL CARE PROGRAMS COMMITTEE

#### Subcommittee on Industrial Commission

D. W. SEIFERT, *chairman*  
ROBERT M. POLK, JR. CLEVELAND W. FLOYD  
CLARENCE L. SHOFFNER WILLIAM F. RIDDLE  
MARK N. PERLIN

**Meetings.** The Committee scheduled one meeting during the year, but because all members of the Committee sent their regrets, no formal meeting was held.

The Chairman met several times during the year with Mr. William Stephenson, Commissioner for the Industrial Commission.

During these meetings some fees were adjusted, some procedures changed, and a new dental form was devised to be included with the insurance claim form.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

#### DENTAL CARE PROGRAMS COMMITTEE

##### Subcommittee on Peer Review

JAMES H. LEE, *chairman*

C. D. KISTLER

L. W. LEE

W. H. PRICE

K. M. RAY

M. B. RICHARDSON

**Meetings.** Chairman met with Executive Committee on June 17, 1972 and with the Dental Care Committee on November 16, 1972.

**Assignments.** The 1972 House of Delegates adopted the following resolution: Trans. 17-1972-H

**Resolved,** that the Peer Review Committee be directed to compile a manual of guidelines for Peer Review Mechanism with the approval of the Executive Committee.

**Manual.** The North Carolina Dental Society Peer Review Procedure Manual was presented and approved by the Executive Committee.

#### Resolutions

This report is informational in nature and no resolutions are presented.

#### DENTAL EDUCATION COMMITTEE

R. B. BARDEN, *chairman*

THOMAS G. COLLINS

RILEY E. SPOON, JR.

KENNETH M. RAY

GUY R. WILLIS

**Meetings.** During the winter of 1972-1973 every school that has a Dental Education Program was visited by members of this Committee. There are presently ten such schools, and the following report is a synopsis of the reports as a result of those site visits.

**University of North Carolina School of Dentistry.** The administration and faculty met with the Committee on January 27, 1973 and gave a very comprehensive report on the current status of the various programs at Chapel Hill. The Committee was impressed with the detailed report given by faculty members and their willingness to discuss all aspects of their programs and their cooperation in answering questions in regards to their opinion as to the effectiveness of the same. The Committee also met with five students and interviewed them in regards to their learning experiences in the present curriculum.

**UNC School of Dentistry, Doctor of Dental Surgery Program.** The 1973 senior class will be the first graduated that has been on the newly revised curriculum all four years. Consequently, it is felt that the revised curriculum is still in a transitional stage. It is the opinion of most all faculty members that the major problems have been identified and that their solutions are much closer now. Through such concepts as TEAM (Teaching Expanded Auxiliary Management) teaching, preceptor supervision, multi-discipline approach for grouping subject matter, and total patient care concept much "dead wood" has been extracted from the old method and additional time has been made available for elaborating on the student's understanding of the patient as a total person rather than emphasis on technical procedures. Under this system more comprehensive training in diagnosis and treatment planning is accomplished in preparing the student to relate dental treatment to the patient's total health more effectively.

In the transitional period the problem of assuring that the minimum basic requirements for all types of technical skills are being met has been and still is apparent. Careful surveillance of this evaluation resulted in intercepting deficiency developing in the area of the Restorative Discipline. The correction was

made possible by alertness of members of the faculty who were reluctant to relinquish proven methodology. Subsequent employment of an effective solution is proving to correct the problem. We are indeed fortunate to have men of vision and tenacity to proven procedures of quality dental education to effect the transformation of the D.D.S. curriculum. The Committee was impressed with the magnitude of the task, the objectivity of the faculty in analyzing their problems, and the optimistic attitude that the future will result in an improvement in dental education at Chapel Hill. The Committee shares this optimism.

The D.D.S. Program is presently enrolling 83 members in the Freshman Class. There exists the possibility of an exceptional student completing training and becoming eligible for graduation in three calendar years, even though the curriculum is not so intentionally designed. It is also possible that one may have to remain five years to be declared competent to graduate. In either case, the revised curriculum allows for electives, in-depth study, research experience, and a wider scope of learning experiences that were not heretofore possible.

With the recent renovation of the old main clinic, physical facilities are greatly improved. However, the departments of Surgery and Endodontics are in need of new and enlarged spaces. It appears axiomatic that in today's society, educational construction is never completed before it becomes obsolete or inadequate.

Other problems consist of lack of patients for removable prosthodontics, problems with computer control, loss of key members of the faculty, and the fact that the salary of faculty members is not on par with comparable professional employment or private practice. The latter condition is critical particularly in the lower echelon of teaching appointments, and this, of course, makes procurement of new faculty members difficult.

The Dental School is presently carrying on two experimental programs oriented along dental health delivery systems through the utilization of expanded duty dental assistants. One program consists of dentists from private practice going to the research program at the Dental School and working with these auxiliary personnel that have had additional training in insertion, carving and polishing of certain restorative materials and other restorative procedures. The other aspect consists of block assignment of senior students working for a two week period with the same type assistants. Current evaluation of this program corroborates previous experimental projects which indicate that dentists working with carefully trained auxiliary personnel can accomplish an increased amount of quality controlled dental treatment. Additionally it affords today's dental student the opportunity to have a singular experience in managing expanded duty auxiliary personnel and working with them to increase his services. Even though the students are made aware that this is an experimental program and that such use of auxiliary personnel is not legal in private practice, the Committee feels that the impact of such a singular experience on undergraduate students is somewhat questionable, and its effect should be closely evaluated.

The necessity for brevity to present this report precludes the presentation of the myriad problems inherent in the task of the D.D.S. curriculum revision. Suffice it to say that the Committee was convinced that the administration and faculty are cognizant of the impact of such a venture on dental education, aware of the problems associated with it, and that they are capable of correcting these problems and producing an improved method of preparing dentists to care for the dental needs of the public.

**UNC School of Dentistry, Dental Hygiene Program.** The dental hygiene program is in its second year of maximum enrollment with increases to spaces for 60 students per class.

Present enrollment is 50 students in the first year class; 52 students in the second year class; and 3 post-certificate degree candidates. Total enrollment is 105 students. The quantity of applications processed far exceeds the number of available spaces and the quality of applications is satisfactory.

During the past year the dental hygiene faculty with repre-

sentratives from the basic science and dental science faculties have undertaken a general curricular review. Modifications and revisions are being implemented in all instructional areas. The most significant changes during the 1972-73 academic year have occurred in the areas of: Dental Specialities—Materials and Techniques, Periodontics, Dental Hygiene Clinical Activities and Community Dentistry. In Dental Specialities—Materials and Techniques, the course work has been revised to give maximum attention to clinical application, particularly as it relates to present practice and future needs. In Periodontics, the time allotted to the didactic and clinic phases has been increased by 18 clock hours. In Dental Hygiene Clinical Activities, major emphasis has been directed toward increased activity in Periodontics and Pedodontics, implementation of the dental—dental hygiene student team concept to better prepare both team concept and added chairside experience in the restorative and endodontic clinics.

In Community Dentistry, student field experience has been significantly increased and new clinical activities in these faculty supervised areas are being planned.

The area of greatest concern is patient supply. The number of suitable patients within the school is not ideal. Every available resource is being utilized or considered. Although it appears that new efforts in the area of community dentistry may improve the situation, minimum basic experience with a variety, in case difficulty should occur in the parent institution.

Another area of concern is the lack of a formal structured, curricular plan for teaching expanded duties. Solutions to this problem are being considered. In the interim all curricular revisions are being designed to provide the students with appropriate background information for future expansion of duties and responsibilities.

**UNC Dental School, Dental Auxiliary Teacher Education ("DATE" Program).** Grant funds were received in 1968 from the USPHS, Division of Dental Health and the W. K. Kellogg Foundation to develop an experimental program at the baccalaureate level to prepare teachers for dental auxiliary programs located in the community colleges. During the 1973 spring semester, 14 dental assistants and hygienists and one dental laboratory technician are enrolled in DATE. Three students graduated in December, four expect to graduate in June, and two anticipate receiving their degrees in August. The quota for new students that may be admitted in the fall is 15.

Currently, the emphasis in DATE is to prepare teachers for the areas of clinical and laboratory techniques, and dental radiology and dental materials. This educational block of courses include a ten or fifteen week internship teaching assignment at Wayne Community College, Guilford or Durham Technical Institutes. Negotiations with additional community colleges will be initiated this spring.

Each year a higher number of inquiries and applications are received from non-residents than from North Carolina residents. During the past four years the DATE program and its graduates have received national recognition and publicity. However, applications from the North Carolina Community College graduates are not forthcoming in the numbers anticipated. Apparently very few associate degree graduates in dental hygiene and certificate graduates in dental assisting and laboratory technology are interested in continuing their education to become qualified for teaching positions. During the past year, the resident quota for new DATE students was not filled. For admission purposes UNC Certificate Dental Hygiene Graduates are not counted in the quota for new students.

**UNC School of Dentistry, Dental Assisting Program.** The dental assisting program continues to be a 10 months training course rendering graduates eligible for certification by the National Dental Assistants Association. The course begins in the summer and by the fall semester students are assigned to dental students with whom they will continue their training. The team concept is emphasized and implemented thusly augmenting their didactic train-

ing. Six hundred hours in clinical training has been gained making this system a mutually beneficial effort.

Forty students are accepted each year and an abundance of applicants are available for selection using the general aptitude and achievement tests.

**Technical Institute of Alamance.** The Technical Institute of Alamance is located in Burlington offering a Dental Assisting Training Program. Dr. Phillip Savage is director and is assisted by Mrs. Mildred Lynch, C.D.A. Other faculty includes one full-time C.D.A. instructor and four dentists as part-time instructors. The curriculum is a 12 months program consisting of four quarters of instruction. Twenty four students are accepted to the program from total applications of 75. Preliminary screening is conducted by guidance counsellors with final interviews and selection by the dental assistant faculty. Class members are mainly from Alamance County, but members are also from Caswell, Orange and Person counties. Most graduates—80 per cent—are able to obtain immediate employment since most of the non-Alamance county graduates return home. Two scholarships sponsored by the Alamance-Caswell Dental Society provide financial assistance to needy students.

The students' clinical training begins at the school with introductory phases given by Dr. Savage and staff on selected patients; however, the bulk of clinical training is given and experience gained in selected dental offices in Alamance County. Most of the dentists participating in this program have at one time or another been on the faculty of the school.

The present physical plant consists of three well equipped operatories, laboratory and lecture areas and space for faculty offices. The current building program which includes moving to a new campus will increase clinical facilities, laboratory area, lecture halls and faculty offices. Already cognizant of the increased role the dental assistant has in delivering the dental health service, these new facilities will better enable the Institute to train assistants the profession will need.

The faculty is at present studying curriculum for possible changes to improve teaching in "expanded duty functions," and also working with other schools in the community colleges of North Carolina which have dental assisting programs.

The school recently sponsored a continuing education course in preventative dentistry and plans courses as the need is expressed by the local dental assistant society.

The school has the invaluable support of a dedicated faculty, the school administration and the local dental society.

**Asheville Buncombe Technical Institute.** Asheville-Buncombe Technical Institute is located in Asheville and offers both dental hygiene and dental assisting programs. Both programs are adequately staffed with qualified dental hygienists and dental assistants for the number of students enrolled in each program. Dr. Baker M. Hamilton is the Chairman of the Dental Programs.

The Dental Assisting Program has a capacity of sixteen students and currently has an enrollment of fourteen students. The curriculum consists of four quarters or twelve months from September to August. The clinical facilities at Asheville-Buncombe Technical Institute consists of adequate laboratory space, three fully equipped dental treatment rooms with new equipment, three radiology stations and appropriate processing equipment. The program is operating under provisional accreditation, to be examined for accreditation in June, 1973.

The Dental Hygiene Program is operating under accreditation eligible status which is the highest status granted to a new program. The school is continuously undergoing accreditation procedures of the Council on Dental Education and an on the site visit by the Council will be conducted next year. There are sixteen students enrolled in the program this year and the same number of students is expected for the following year. The program consists of seven quarters. Presently there are two dental hygiene instructors on staff and they are planning to hire a third instructor this spring. The dental hygiene clinic is equipped with

twelve dental chairs and twelve mobile units, two sterilization areas, two x-ray treatment rooms, one processing area, and one central supply area. Laboratory space is more than adequate and the students have their own locker and lounge area.

The Dental Hygiene Program has an advisory committee consisting of three dentists from the local dental society and three practicing dental hygienists from the community.

**Central Piedmont Community College.** This school has both Dental Hygiene and Dental Assisting programs. Dr. Harry G. Snyder is chairman of the dental programs. Faculty consists of two full-time and three part-time instructors in Dental Hygiene, and one full-time and one part-time instructor in Dental Assisting. In addition, part-time instructors are utilized for specific subjects.

Both Dental Assistant and Dental Hygiene programs are accredited by the ADA and the State of North Carolina.

The Dental Assistant Program is a four quarter program lasting one year. Two classes of 17 are admitted each year.

The college requires a placement test of all students which examines mathematics, English, vocabulary, reading and comprehension. Those who demonstrate a weakness are encouraged to participate in remedial courses. In the Dental Programs the applicant also takes the GAT-B test (General Aptitude Test Battery) given by the Employment Security Commission. This measures spatiality, finger and manual dexterity along with many other abilities. Both programs are grossly over subscribed with waiting periods varying from six months to well over a year.

The Dental Hygiene Clinic is composed of two rooms, the larger with 20 chairs arranged in circles of 10 chairs each and the smaller consisting of 10 chairs arranged in two semi-circles of 5 chairs each. The dental operatory for dental assistants is comprised of three separate operatories. The laboratory has stations for 17 students. The x-ray clinic has four chairs with equipment separated by lead lined walls. The classrooms are available in the dental facilities or classrooms anywhere on the campus.

A new building of five floors has been funded but federal funds are being withheld pending negotiations with contractors. The first floor will be devoted to the Dental Programs.

Several continuing education courses are given each year with an annual one occurring each fall. Audio-visual tapes are innovations presently being pursued in depth by the college and the Dental Program. Roentgenology has already been placed on tapes, parts of other courses are on tape and others are in the process of being taped.

Dental Hygiene students spend three weeks in the Veteran's Hospital participating in the hospital program.

Students graduating from these programs appear to be in demand. Little adverse criticism has been heard and the goodwill of the dentists is observed in most of their relationships with the graduate.

**Coastal Carolina Community College.** This school has both Dental Hygiene and Dental Assisting programs. Dr. Thomas J. Pace is chairman of Health Occupations.

The Dental Hygiene program is a two year program with graduates receiving an Associate in Applied Science Degree. This is the first year for this program with 19 students enrolled. An "accreditation eligible" status is now in effect by the American Dental Association Council on Dental Education with full accreditation being sought in 1974 before graduation of the first class.

The Dental Hygiene clinic consists of ten complete units, three ultrasonic instruments, sterilization room, dental radiography room, oral health education and plaque control rooms, locker rooms, lounges and faculty spaces. A panasonic television camera and video tape machine has been purchased with funds granted by the Dental Foundation of North Carolina.

Dental Hygiene applicants must take the Dental Hygiene Aptitude Test sponsored by the American Dental Hygienists' Association and high school credits in chemistry, algebra, and biological sciences are required.

The program has two full-time dental hygienists on the faculty at present with a third anticipated for the second year.

The Dental Assisting program is under the direction of Sue S. Slaughter, C.D.A. with Cheryl Kearney, C.D.A. and Dr. Pape assisting as instructors. Nineteen students were selected for this year's class out of 44 applicants through use of mental aptitude and dexterity tests.

The facilities consists of Dental Materials Laboratory with 16 stations fully equipped as recommended and a fully equipped dental operatory. In addition the department had two additional fully equipped dental operatories, x-ray processing room, supply room, reception room and business office, sterilization area and faculty spaces.

In addition to the use of the dental clinic facilities at the school, the assistant trainee receives even more of her clinical practice in facilities off campus consisting mainly of facilities of the Camp Lejeune Marine Corps Base. Fifteen dentists in the Jacksonville area provide additional clinical training for the student in private practices.

This program offers continuing education courses.

**Durham Technical Institute.** The Durham Technical Institute is a seasoned, stable and competent center of education directing its efforts toward training its student body in many and various technical skills not requiring a four year or baccalaureate degree.

When the Institute offered its first course in Dental Laboratory Technology in 1961, it was the fourth such accredited school in the United States to offer this course. At present there are 33 such accredited schools and there are about the same number non-accredited, with numerous new schools being proposed for the future. The degree given to the Institute graduate is "An Associate Degree in Applied Sciences."

The demand for the graduates of the Dental Technology course is very great, and there seems to be no problem in their finding employment. If they so desire, they can continue their endeavors in several other four year Institutions of Higher Education, and are given 62 semester hours credits as a result of their training and degree from the Institute. However, it is interesting to note that very few ever pursue this possibility, while on the other side of the coin, there are many enrollees in the Laboratory Course who have one or more years of college credit. In fact, at present there are 19 with one or more years of college and 8 of this 19 have 3 or more years.

Entrance requirements are a High School Diploma or its equivalent and passage of an entrance examination, which is a bona fide and effective tool consisting of three sections which are (1) verbal, (2) math, and (3) digital dexterity.

The present potential of the School is 72 students, consisting of 40 in the freshman class and 32 in the sophomore, or graduating class. Normal attrition problems seem to reduce entering class to 32 for the sophomore class, and this year it seems that about 29 of this 32 will graduate. On the surface, this appears to be a high attrition rate, but it appears to average out this way from year to year.

The 40 entering students are selected from about 100 applicants per year. Beginning in the spring of 1974, an additional freshman class of 20 students will be enrolled, and the School will begin to operate a double schedule with 2 freshman and 2 sophomore classes, and will operate from 8:00 a.m. until 10:00 p.m. to accomplish its goal. There seems to be mixed emotions regarding this new venture.

There are at present 4½ full-time instructors in the Technology School, and 2 more will be needed with the additional new classes. One full-time teacher is needed for each 14 students.

The students and staff seem to be very enthusiastic and cognizant of their identity as a member of the dental team, and do not wish to be left out of the activities of organized dentistry. They would like to be involved in the activities of our annual meeting in Pinehurst, and be invited to participate in the presentation of a display in the same manner as other auxiliaries.

**Guilford Technical Institute.** Guilford Technical Institute is located at Jamestown. Dental programs consist of a Dental Assisting program and a Dental Hygiene program. Dr. George F. Mayer is Director.

The Dental Hygiene curriculum is a seven quarter (21 months) program. There are 23 second year students and 27 first year students. Graduates are required to take National Board Examinations. All students are screened for admission. Criteria for admission are satisfactory performance on Scholastic Aptitude Test and Dental Hygiene Aptitude Test as well as personal interview.

The accreditation status remains "Provisional Approval." All recommendations made at the last accreditation visit have been fully implemented with one exception. A full-time associate director is being sought and part-time personnel have been employed to partially meet the requirements in this area. Periodontology training in the third and sixth quarters has been initiated. There has been an improvement in the numbers of adult patients seen by the students, but there must be continuing effort to meet Council on Dental Education optimums.

The Dental Assisting Program is a four quarter (one year) program. Applicants must be high school (or equivalent) graduates. The General Aptitude Test Battery is used to augment application evaluation data. Students receive extramural training in their last quarter in local private practices, public health clinics and the local Veterans Administration Regional Office dental facility. There are 21 students. Students in both programs will receive some "in hospital" training at the High Point Hospital this year.

The physical plant is a new health science building with adequate equipment. Dental Hygiene clinical facilities consist of a 20 chair fully equipped. Plans are under way to convert two chairs to plaque control. These continued expansion and development projects reflect the continued support Guilford Technical Institute receives in its health science programs.

**Fayetteville Technical Institute.** This school is located at Fayetteville and consists of a Dental Hygiene curriculum at the present time. The school is headed by Dr. David Dunham. The school will graduate its first Dental Hygiene class in June of 1973. The first class consists of 26 enrollees and 17 of these will be graduating. Out of the 17 graduates, 6 will be moving out of the state and 3 out of the area. At this time only 3 students are placed locally. Until a greater demand is made the school anticipates enrolling 24 students per year.

The physical facilities are adequate and the school plans to install a closed circuit television system with funds donated by the North Carolina Dental Foundation and matching funds from the parent school. An amphitheater is being prepared for use with this equipment. The school is currently conducting continuing education courses in the evening for hygienists and for assistants who are already trained. These courses are basic sciences and dental materials.

The school will begin a Dental Assisting curriculum in June, 1973. They anticipate fifteen students in this program.

**Wayne Community College.** This school is located at Goldsboro and consists of curricula both for Dental Hygiene and Dental Assisting. The director of dental programs is Dr. Fred Sproul, and his faculty consists of several licensed hygienists and certified dental assistants plus part-time dentists as instructors.

The present hygiene class consists of 59 students, and the school has graduated a total of 79 since its beginning in 1967. There were 94 applicants for the 1973 class from which 33 were selected. The college provides a placement test that indicates verbal and mathematical scores plus intelligence quotient. The dental department utilizes a minimal average in these three areas.

Physical facilities presently consist of a clinic, composed of 15 units completely equipped, and separately 3 fully equipped dental operatories. For the number of students presently enrolled there is not sufficient space for storage, classroom, operatory space, reception room space, and audio-visual and instructor office space. Future plans call for 34,000 square foot allied health building in

approximately three years at which time they anticipate expanding the size of both classes.

The Dental Assisting curriculum consists of a 12 month program and presently consists of 21 students. Since the school's beginning in 1963 they have graduated 141 dental assistants. This program also has inadequate space for its students and faculty and anticipates improvement when the present building program is accomplished.

The facilities are made available for several study clubs in the eastern part of the state. At the present time 4 such study clubs are using the facilities for continuing education courses.

The North Carolina Committee for Continuing Preventive Dental Education gave a one day course for 100 dentists and auxiliary personnel.

Two hundred Fifty patients were examined at the Wayne County Cancer Clinic at Wayne Community College. Dental Auxiliary Education students (DATES) from the North Carolina School of Dentistry do teaching internships at Wayne Community College. The school has an advisory board composed of local dentists and is providing a very vital service to eastern North Carolina.

**Western Piedmont Community College.** This school is located in Morganton and offers a twelve month course in Dental Assisting. The program is under the direction of Dr. George Johnson who is the full-time supervisor and instructor. He is assisted by one full-time certified dental assistant, four part-time dental assistants, one part-time dental hygienist and one part-time dentist.

The school has a capacity for 16 students of one class per year. A high school education is mandatory; however, two screening tests are given: GATB and the Standard C.G.P. Presently there are 12 students enrolled. At this time there are eleven local area students attending night classes in Dental X-ray Technology. This program of instruction was first begun in June, 1972. The length of the course is 11 weeks, 2 nights per week, 3 hours per night. The maximum number of students this course can enroll is 16.

The present facilities consist of four complete dental operations, two x-ray rooms, adequate laboratory space and one office. These are part of the Mental Health Center. Also the Biology Laboratory at Western Piedmont Community College is now being used, having more than adequate space for the students.

An information presentation has been given and will continue to be given to all high school students in immediate and surrounding counties concerning the curriculum and courses offered in Dental Assisting at Western Piedmont Community College.

The college and faculty are very much interested in offering one course per quarter in most dental office techniques upon request provided there are enough applicants interested in enrolling. These courses would eventually lead to one becoming a certified dental assistant.

The school has an advisory board of five local dentists and one certified dental assistant.

The new dental building under construction will be completed by November, 1973. It will contain over 3,000 square feet of space. It will be complete in nature with a total of 15 rooms consisting of 6 dental treatment rooms, complete laboratory facilities, as well as x-ray processing (including panorex). Closed circuit TV to each room will be provided along with a 12' x 24' conference room.

Over \$100,000 of new and modern equipment in storage will be installed in this new structure. A library has already been established and adequate facilities will be provided in it. There is a current need for all kinds of dental textbooks, (old or new), scientific journals, and ADA Journals. With the potential of the new facilities this program will no doubt increase and continue to be a vital part of progressive dentistry in this area of North Carolina.

**UNC Dental School Salaries.** The Committee has noted with concern that the basic starting salary of faculty members at the

UNC School of Dentistry is below par when compared to comparable professional employment or private practice. This condition creates difficulty in procurement of capable, desirable faculty members. The Committee is studying the situation to the end that it can recommend appropriate action in the future to correct it.

**Recognition of Community Colleges.** The various community colleges and technical institutes included in this report perform a very vital service to the profession by educating dental auxiliary personnel. The Committee feels that it would be to our mutual benefit and understanding to have an opportunity to discuss their problems and presents an appropriate resolution at the end of this report.

**Appreciation.** The Committee wishes to express its sincere appreciation to the following dentists for their invaluable assistance to the committee in preparing this report: Wayne C. Anderson, Mett B. Ausley, R. A. Carnevale, Jerry R. Clark, C. Dean Couch, Jr., W. M. Heeden, Jr., Ben H. Houston, Owen R. McKenzie, Thomas G. Nisbet, Walter S. O'Berry, Robert H. Owen, Jr., Auburn L. Poovey, John A. Stephens, and Mitchell W. Wallace.

#### Resolutions

**4. Resolved,** that the Annual Session Committee be instructed to offer an invitation to the various schools that offer dental education programs to participate in our scientific sessions by means of whatever type exhibit they deem appropriate.

### DENTAL EDUCATION COMMITTEE Subcommittee on Continuing Education

J. HARRY SPILLMAN, *chairman*

ROY L. LINDAHL, <i>Consultant</i>	WILLIAM H. PRICE
J. FRED SPROUL	JON W. COUCH
WILLIAM C. KEITH	LINDA HEEKIN
JOHN W. GIRARD, JR.	BRENDA REAVES
CHERYL KEARNEY	

**Meetings.** The Sub-committee held no meetings.

**Background Information.** The 1972 House of Delegates adopted the following resolution: (Trans. 26-1972-H)

**Resolved,** that the State Board of Dental Examiners request of each dentist, at the time of the annual license renewal, a report reflecting the achievement in continuing education—using such criteria as set forth by the North Carolina State Board of Dental Examiners. This information gathered by the Board be furnished to the House of Delegates for further study of continuing education principles.

**Activities.** As a result of a recommendation of the District Officers Conference, a Committee known as the Continuing Dental Education Committee of North Carolina was appointed. Its membership consists of one representative of each of the following organizations:

1. The North Carolina Dental Society
2. The University of North Carolina School of Dentistry
3. The North Carolina State Board of Dental Examiners
4. The Dental Foundation of North Carolina, Inc.
5. The Dental Health Division of the North Carolina State Board of Health
6. The Old North State Dental Society

Additionally, it will be proposed at the next committee meeting that a member of the Academy of General Dentistry be added.

The objective of this committee is to "structure a system making quality dental education readily accessible to all licensed dentists in North Carolina and their auxiliaries."

The Chairman of the Continuing Education Sub-committee met with this Committee as a member at their initial meeting in Charlotte January 3, 1973. Another meeting is planned soon.

The President of the North Carolina Dental Society has pledged its support of this new committee.

#### Resolution

**5. Resolved,** that the formation of the new Continuing Dental Education Committee of North Carolina represents a forward step in a coordinated approach in providing quality continuing dental education to dentists and their auxiliaries in North Carolina and be it further

**Resolved,** that the North Carolina Dental Society pledges its support of this new Committee.

### DENTAL EDUCATION COMMITTEE

#### Subcommittee on Dental Hygienists

JAMES M. ZEALY, <i>chairman</i>	
NORMAN B. GRANTHAM, JR.	JOSEPH R. SUGGS
KEITH L. BENTLEY	CAREY T. WELLS
C. R. VANDERVOORT	LINDA HEEKIN

**Meetings.** The Committee held no meetings. Chairman met with the President of NCDHA in August, 1972 for discussion of mutual problems and concerns. Chairman met with President of NCDHA thereafter as needs arose for better liaison between the two societies.

**Assignments.** Improve communication potential between the two societies—NCDS and NCDHA—thereby insuring a more harmonious relationship between the two groups.

**Results of Study.** It is recommended that future committees of this type be composed of four members from each society, as follows: President, President-Elect, one member from the Executive Committee and one member-at-large. The member-at-large from the NCDS would serve as chairman. This committee should meet at least once yearly.

#### Resolutions

This report is informational in nature and no resolutions are presented.

### DENTAL EDUCATION COMMITTEE

#### Subcommittee on Dental Hygienists Supplemental Report I

The committee wishes to submit the following resolution for the consideration of the House of Delegates:

#### Resolution

**24. Resolved,** that in the future, committees on dental hygienists be appointed on the state and district levels, composed of four members from the North Carolina Dental Society and four members from the North Carolina Dental Hygienists Association as follows: the president, president-elect, a member of the Executive Committee and one member-at-large, and be it further

**Resolved,** that member-at-large serve as chairman, and be it further

**Resolved,** that these committees meet at least once annually.

### DENTAL HEALTH COMMITTEE

ZENO L. EDWARDS, JR., <i>chairman</i>	
ALTON SMITH	JACK MENIUS
FRANKLIN MARTIN	RALPH YOUNG
E. A. PEARSON	ROBERT TAYLOR
BREECE BRELAND	HENRY LINEBERGER
JACK POVLICH	

**Meetings.** The committee held meetings on November 12, 1972 and December 6, 1972. On site visits were made on January 17, 1973 and February 7, 1973.

**Assignments.** This committee was asked to investigate and evaluate the dental care provided in all the state agencies, in-

cluding the Division of Dental Health. This is a worthwhile project and should be continued if for no other reason than the fact that the image of dentistry is very poor in some of these agencies.

The various secretaries of the departments of state government were contacted and permission granted to conduct on site visits. A questionnaire was prepared and sent to the men involved to serve as a basis for talk. The prison complex in Raleigh was visited on one day and Dorothea Dix Hospital on another full day.

This report will contain observations from these on site visits as well as old reports from other observers. This committee will offer some suggestions as to how the situation can be improved.

We tried to evaluate the agencies as to the following:

1. Personnel
2. Equipment
3. Services provided
4. Patient load

The cooperation of everyone involved was tremendous. No one seemed to be trying to hide anything. The best and the worst were laid out for us to see and evaluate. There is still much to be done.

#### **PRISON SYSTEM—A DIVISION OF DEPARTMENT OF SOCIAL REHABILITATION AND CONTROL**

##### **Central Prison**

The dental department in central prison is badly designed and poorly equipped. The dental units are in very poor condition. According to the doctor, the supply house will not come out and make repairs—claiming the units are out of date. The units are five years old. We followed this up and the company involved was not aware of any request. One dentist is on staff at present. Dark room is in the EEN&T clinic so it is not available except at odd times.

The doctor has no office. His desk is the operating stool. No oxygen is available, and constant requests are ignored, evidently by the business manager. Materials seem to be of high quality. Aristoalloy is the alloy used—when used. Most of the work seems to be extractions and dentures. Back log of dentures is very long. A laboratory is in the prison with one technician. No other trained auxiliaries. I have enclosed a copy of dental policy in the prison department.

The central prison dental clinic did 16,966 procedures from July 1, 1971 to June 30, 1972. This was done by two men. The surgery is done by local oral surgeons on a part-time basis.

##### **Women's Prison**

This is outrageous to say the least. A dentist is on contract for one-half day a week. Working with the equipment available probably makes it seem like a week. No high speed equipment and the low speed handpiece cannot work. The x-ray is available as a piece of furniture because it does not work. Office is located in the first aid room. Extractions and temporary fillings are the main treatment these 450 women receive.

##### **NCC Center**

This is served by one dentist. Services seem to be largely extractions. Daily work load is determined by sick call. Office poorly arranged but far superior to central prison. An order placed three months earlier for alginate was received while we were there. Auxiliary help varies from day to day. Office has no budget and no idea of what can be purchased or who to see.

##### **Polk Youth Center**

This center has probably the world's best barber shop and school which is so necessary in these long hair days. It is brand new and would make a first class dental clinic. Instead the one dentist has a part of the first aid room. His equipment is very good. The auxiliaries are inmate but are very good because this is a prestige position, and they want to keep the jobs. Again extractions mostly. A cavitron is available but gross scaling is only done because of work load.

The Harnett County prison unit is served by one of these men. All other prison work throughout the state is done by local practitioners on an emergency basis; up to \$25.00 per patient. If extensive treatment is required the patient is supposed to be transferred to Central Prison.

While not seen, the prison unit at Morganton is supposedly well equipped.

#### **DIVISION OF MENTAL HEALTH**

##### **Dorothea Dix Hospital**

The contract between this medically oriented institution and the socially oriented prison system is tremendous. The dental offices are well equipped, efficient and delivering a fine service. Two men are handling 1,600 patients. These men have no trouble getting supplies or service of equipment. This is done on a contract basis, but immediate delivery. There was a salesman in the office while we were there. Equipment purchases require three bids. These men need more room and auxiliary help. We examined treatment records, yearly reports and saw patients receiving treatment.

It is important to bear in mind that we visited only one of the mental health hospitals. This cannot be considered complete until the following hospitals are visited:

1. Broughton Hospital in Morganton
2. John Umstead Hospital in Butner
3. Cherry Hospital
4. O'Berry Center
5. Caswell Training Center
6. Murdoch Center
7. Western Carolina Center

#### **CONCLUSIONS AND SUGGESTIONS**

1. The dental care in the women's prison must be emphasized. 450 women can not have their dental needs met in such a manner. With decent equipment the same amount of time could be more productive.

2. A director of dental services in the prison system should be appointed on a full-time basis. He would set goals, set up programs and be responsible for central purchasing of supplies and equipment. A central dental clinic should be created. By all means this should be done in cooperation with the dental staff. This clinic could be more efficient and permit a far better standard of care for the patients. Well trained auxiliaries must be used. It is within the realm of possibility that some women inmates could be trained for a useful occupation.

3. Some basic criteria for employing people should be established by the director. Employment seems stable in most branches of state government except for prison systems.

4. This committee is not well versed in prison philosophy. If rehabilitation is the goal of the prison department, we feel that the dental care should be more preventive oriented and more emphasis on retention of teeth. This approach would be less expensive and more rewarding to patients and dentists.

5. It is our understanding that the use of students and graduate students has been very satisfactory. This would be much easier in a central clinic and should be advantageous to all concerned. This would have to be with the advice and consent of the school as I can see the dangers in a training situation.

6. There seems to be no talking relationships between the various agencies. This is most necessary if we are to have effective utilization of all the people involved. As an example it would be advantageous for some of the men in Division of Mental Health to cross agency lines and perform dental services in the other agencies in order to maintain their talents and training. This would help in cases where patient load is great; provide vacation coverage, and certainly provide better care. This is not possible or practical in all situations.

7. A mechanism of reports and chain of command needs to be set up. This would be aided tremendously with the overall dental director in the prison system.

8. Continuing education is just as important for these men as it is for anyone. Provisions should be made for this.

The North Carolina Jaycees had as a project the survey of the dental needs of children in the eight Youth Development Schools. To my knowledge only the original one reported, at C. A. Dillon School, was ever done.

I enclose in this report two other reports. One was submitted by the staff and the other by two graduate students. Many of our observations and suggestions are similar.

I would also suggest that each district conduct on site visits for the agencies within their districts. The future evaluation of the Division of Dental Health could be done by a central committee. If these agencies are to be evaluated properly, it should be done on working days and not week-end visits. If the responsibility is shared by many, the load is not so heavy. Orphanages, schools for the deaf and blind, remaining mental hospitals are scattered too far for a small group to do a good job.

#### Resolution

**7. Resolved**, that the Dental Health Committee continue to investigate and evaluate dental care provided in state agencies until all state agencies have been evaluated.

### DENTAL HEALTH COMMITTEE

#### Appendix 1

### DENTISTRY TO INMATES IN THE NORTH CAROLINA DEPARTMENT OF CORRECTIONS

By: Thomas M. Austin  
C. David Chapman

#### ACKNOWLEDGMENT

We would like to thank the personnel of the North Carolina Department of Corrections for being helpful in teaching us the mechanics of the prison system. We are glad to see the beginning of awareness of the prison administration in treating inmates in a therapeutic manner rather than a strictly punitive fashion as was done in the past. It will take a long time before the results of the efforts now being made will take effect. We should all be cognizant of the need for change in the system and strive to improve it.

For a period of five weeks, we were members of a medical evaluation team which visited numerous correctional institutions in North Carolina. These ranged in area from Morganton to Currituck Sound. We were specifically interested in the type of dental care given, mode of delivery of dental care, variations in quality and amount of care given inmates, and the dental I.Q. of inmates. The evaluation of these data and suggested improvements hopefully could lead to an affiliated program between the State Correctional Institutions and the UNC School of Dentistry.

The present dental system in the institutions is minimal. The three full time dentists (along with several part-time dentists) are all located in the general area of Raleigh, in Polk Youth Center and Central Prison. These dentists have such a high work load and high inmate turnover that the majority of their treatment must understandably be of emergency nature. Dentures are placed high on the list of priority treatments and often routine operative treatment and preventive dentistry care are completely lacking.

In the Raleigh area there are four separate dental facilities. Harnett Youth Center, which presently has no dentist, is forced to bus their inmates to Polk Youth Center for dental care. This is done once a week. Harnett is equipped with one dental unit located in a portion of the first aid room. Facilities of this type are very discouraging to a dentist looking for a position with the Department of Corrections.

Polk Youth Center, although it has a very capable dentist, is also very restricted in space. The dentist has one small operating room with one dental unit—there is hardly enough room to turn

around. Polk has no laboratory space at all; impressions are poured in the first aid room. The dentist shares an office with the first aid room, and has expressed his discontent with the situation. We found him to be extremely cooperative, and the majority of youthful offenders there liked and respected him.

Women's prison has one chair with only slow speed equipment. Emergency treatment is delivered there one hour per week. There is no way adequate minimal treatment can be given with such time and equipment restrictions. Women cannot receive even an amalgam restoration without personally paying a private dentist to do it. The women receive the least dental care of any one group in the system. While interviewing several women in the Correctional System, they related their anguish and disgust at the dental treatment given. Many wanted dental treatment. Because of the difficulty involved in obtaining private dental treatment their dental care is being neglected. Several evenings were spent interviewing inmates at Women's Prison in Raleigh. A questionnaire was compiled asking various medical and dental questions. This questionnaire is included. The questions were not meant to obtain statistical data, but merely to give us a general idea of the type of medical and dental care the inmates were obtaining, and to ascertain their feelings about the quality of care being given. We accompanied two medical interns during this period of time. The questions are not ideal and in future programs will be altered.

#### Questionnaire

- A. Personal
  1. Age ..... Sex ..... Race ..... Location .....
  2. How long have you been in the prison system?
  3. How long have you been in this institution?
  4. Where were you before you were here?
  5. When will you be up for parole or release?
  6. How has your being here affected your relationships with your family?
- B. General
  7. What do you do at the prison—type of work?
  8. Do you feel as if you have been discriminated against? By whom?
  9. Do you have headaches? How often? Do you ask for medication?
- C. Health and Personal Hygiene Practices
  10. How often do you take a bath?
  - \*11. How often do you brush your teeth?
  - \*12. Do you own a toothbrush or toothpaste or powder?
  - \*13. If so, how are these supplies obtained?
  - \*14. Do you think dental health is important? Are you concerned about it?
  - \*15. Do you eat many sweets and drink many soft drinks?
  16. Before coming to the prison—
    - a. How often did you brush your teeth?
    - b. How often did you see your doctor?
    - c. How often did you see your dentist?
    - d. How often did you have your eyes checked?
- D. Medical History
  17. Did you receive a physical examination upon admission?
  18. Did you receive a chest x-ray upon admission?
  - \*19. Did you receive a dental examination upon admission?
  20. Have you received any medical care since you have been here?
  - \*21. Have you ever had any dental problems such as a toothache?
- E. Medical and Dental Care Delivery
  22. Since being here at the prison, what medical problems have you had?
  23. What was done at the prison to solve these?
  24. Would you have handled them differently on the outside?
  25. Do you feel you can see a doctor as often as you need to?
  26. Did you ever need to see a nurse and couldn't?

27. Have you ever been in segregation? How often did you see a nurse?
28. Do you have good eyesight?
29. Have you had an eye exam since being at the prison?
30. Have you been tested for tuberculosis since you have been here?
- \*31. Have you ever requested a special diet? Did you get it?
32. How were you treated by the doctor during the physical exam?
33. How sick must you be before you seek medical help?
34. Who is in charge of sick call? What is your opinion of him?
35. How are you treated at sick call?
36. If you became ill when sick call is closed, what would you do?
37. How would you expect to be received?
- \*38. Has the dentist urged you to brush your teeth more often?
- \*39. When do you seek dental help?
40. What is your biggest problem or complaint here?
41. Would you improve medical care here? If so, how?

\*—denotes dental oriented questions

The questions relating to dentistry nearly all revealed the stark neglect of dental care at this institution. Question No. 12 showed that nearly all the women owned toothbrushes; they were either bought by the inmates or by the institution if the inmate had no outside income. Nearly all the women related a feeling that dentistry was important and that they were concerned about it. There seemed to be no difference in brushing before entry into the correctional system and after entry. The dental examination deserves a special note. The women are hurried through the exam; this is not unusual for the time allotted for a dentist at this institution. For an edentulous patient to receive a special soft diet, she must have a doctor's note requesting one. Regarding brushing instructions given by dentists, during the interviews it was noted that oral hygiene instructions and encouragement to brush more frequently were seldom given. Question No. 39 brought various responses, some stated that they had to be in severe pain before they sought treatment.

These problems exist mainly because of the previous lack of importance placed on dental care. Perhaps with better facilities more dentists will consider playing a role in prison dentistry.

Central Prison has two full time and several part-time dentists. There are at present three operatories with the possibility of opening a new one in the honor grade unit.

All of the previously mentioned unit operatories are small, and no dentist has room enough for a private office. Any professional person needs and should expect space for use as an office for consultations with patients, consultations with medical personnel, studying, developing treatment plans, reviewing charts, storing medical and dental literature, records, etc.; or simply just to have a place to regain one's thoughts and have a relaxing cup of coffee in peace.

The inmates in the farm camps receive emergency treatment, usually consisting of extractions or possibly replacing a temporary filling. These duties are usually performed by a local community dentist. There are many small units that are having difficulty persuading a community dentist to help them. Four such units are located at Currituck, David, Forsyth and New Hanover counties. It was also reported to us by the medical interns that one unit for mentally retarded youths at Maury, N. C. did not give any dental hygiene supplies to their indigent inmates; this is very discouraging.

Mention should be made of the antiquated radiographic equipment present throughout the correctional system. During the summer we were assisted by inmates and, although they were not trained, their help was greatly appreciated. One of the functions they served was to take radiographs. During radiographic procedures we usually left the entire dental area. Exposure time of the film at the prison was 2-3 seconds. This is unduly haz-

ardous since ultrafast film can be obtained and the film can be exposed in a fraction of a second.

Another stark deficiency noted during the summer was the lack of necessary and emergency equipment. Very little Endodontic equipment was present at the Central Prison during the first part of the summer. This equipment is essential in the armamentarium of a dental clinic. We ordered various endodontic instruments at the beginning of the summer; at the conclusion of our summer program we had not received the equipment. Usually for materials over \$10.00 it may take as long as three months for orders to be filled since bids must be obtained. This is extremely frustrating for a dentist who needs equipment and must wait months for it to be delivered.

#### Proposals

The present Dental Facilities of the N. C. Department of Corrections is definitely inadequate. The facility is mainly an emergency dental clinic. There are several reasons for this. The main one is a definite lack of space and inadequate facilities. A start must be made immediately, to compensate for the complexities and red tape involved in establishing new facilities or improving old ones in the prison system.

In approaching the problem, we feel that centralization of the dental facilities is the most efficient method and will be most productive in establishing good oral health for the inmates. The first step is to completely centralize the existing small and inefficient dental units. During this past summer, there were as many as three dentists and one dental student utilizing the three operatories in the central prison dental clinic. One centralized dental clinic in the Raleigh area could be equipped utilizing the seven dental units now present at Central, Harnett, Polk, Women's and the honor grade unit at Central. Soon the dental school at UNC will be selling their old dental units; it might be to the advantage of the prison to buy as many as they need in establishing and furnishing a dental clinic. This multiple chair clinic located near Central Prison would be more productive and efficient than separate individual units. The outlying camps could bus the inmates in, which is more economical than sending a dentist to one unit with one operatory. During the summer months as many as five dental students could be utilized in Raleigh. The students would gain tremendously from the practice, at the same time the majority of dental treatment could be accomplished during the summer months. One centralized clinic, working properly with a director of dental services in charge, would be more efficient than the existing situation. Since the state does not provide an over-abundance of funds, the most efficient method should be utilized. Dentists working together should stimulate enthusiasm and promote continuing education. Also, getting the dentists together would allow their needs and desires to be more clearly expressed and more attention would be drawn from administration sources. We feel that, until now, dental care has been alienated from the medical services. It must be emphasized that dental care is an integral and definitely an essential part of total health. Dental caries is definitely the most prevalent disease in the United States.

In reiterating our idea of a large consolidated dental clinic we believe it would be much less expensive to transport prisoners to an area than isolating a dentist in a one chair operation. Ideally, three or four major dental facilities located at strategic points across the state would aid in improving dental care. Acceptable sites might be Raleigh, Wilmington, Morganton and Asheville in the west.

Before any changes are made or even considered there should be a coordination and an understanding made between Medical and Dental personnel in the Correctional System. Presently there is definitely a barrier. There is a rather large pay discrepancy between an M.D. and a D.D.S. in the system; this has led to some resentment. Secondly, the Medical Director and his associates should be educated as to the modern concepts of Dentistry, especially in the field of Preventive Dentistry. We feel an active preventive program is the only solution to the dental crisis in the

correctional system. Dentistry in the prison system needs an active Director of Dental Services. A part-time dentist is serving in that post presently. Although we found him to be most helpful and definitely an admired and experienced dentist, we feel that a dental director should be one more closely related with the Department of Corrections. This position is a time consuming one and we feel one that should be held by a dentist employed on a full-time basis by the Department.

A preventive program must be initiated immediately. Presently there is no preventive dentistry program in active operation. Occasionally a toothbrush will be given to an inmate who requests one and has no money. We feel that items such as toothbrushes are a necessity and should be given to every inmate who needs one. There is no way to give total care to every inmate; he may be given a two-month sentence and it would not be feasible to provide him complete dental treatment when someone who has been in prison for 10 years and has had no treatment. What would benefit the short-term prisoner the most would be an education in oral hygiene; teach him to brush and maintain his oral health. This is the minimum requirement that all inmates should expect. Presently one of the staff dentists is carrying on an experimental preventive program. It is hoped that it will be successful. Inmates or other personnel can easily be trained in giving preventive instructions. Dental assistants and technicians just getting out of the armed services could aid tremendously in establishing an efficient system. Medical corpsmen could also be utilized in giving Preventive Dentistry instruction. It should be stressed that qualified and trained personnel should be utilized in giving instructions. The attitude of the inmate with regard to dental health should be noted. The inmate interested and concerned in oral hygiene should be given priority for treatment. Presently there are many interested inmates concerned about their oral health who can't get treatment. It is the attitude of several of the dental staff at Central Prison to (1) Take the inmates who are in pain (2) Take the people with no teeth at all (3) Take routine patients. This idea is unrealistic at the prison dental units and until things improve there is nothing that can be done. Category No. 3 is not done as frequently as the other two categories, and understandably so.

Once a preventive program has started and better facilities are present in the prison, further coordination between the university and the prison could be started.

A Dental Assistant program for expanded duties could be started. The students could get valuable clinical experience at the prison under proper instruction. This experience would be invaluable for the inexperienced dental assistant and could be productive for the prison system. The program could be maintained throughout the school year, and could serve as a possible internship.

A program utilizing dental students was started this past summer. Although these students were only able to practice dental procedures the last three weeks of the program, the summer was productive. The need for a better dental program to be started was seen and a great deal about the workings of the system was learned. The conditions existing in the prisons were alarming and it is hoped that they will improve.

Upon completion of a larger clinic in the prison, as many as five dental students could participate during the summer gaining valuable experience. There is definitely a need for jobs for senior dental students during the summer months that are oriented toward dentistry.

The dental director and his associates are performing oral surgery on Tuesdays; students could gain much by observing these surgical procedures.

A preventive dentistry program could be maintained by students at the prison. Results could be followed much more closely by selecting various inmates to serve on test and control groups. Much research could be gathered that would be useful in establishing better and more efficient preventive measures.

The prison offers much in the way of the study of oral pathology. I can think of nowhere else where such valuable

teaching material could be gathered that would prove so important in increasing the student's knowledge in pathology. I'm sure that if a student could see squamous cell carcinoma, for instance, the signs and symptoms would have more meaning much longer than if he read it from a textbook. These ideas are offered in the hope that both the school and correctional department would benefit. The programs would go far in improving the general oral health of inmates.

## DENTAL HEALTH COMMITTEE

### Appendix 2

Date: October 29, 1971

Dental Services in North Carolina Department of Prisons.  
An Introduction to Changing Policy

Written By:

Dr. T. R. Cannon—C. P. Dental Clinic

Dr. Bill Dennis—PYC

For Presentation to:

Mr. Lee Bounds—Commissioner of Corrections

Dr. Morton Meltzer—Medical Director

Dr. Stanley Blackledge—Warden-Central Prison

Mr. Sam Garrison—Deputy Warden—Central Prison

Dr. Hargrove—Department of Mental Health

Mr. Henry—Department of Corrections

All other Professionally Interested Parties

We would like it understood that this paper is preliminary and was written as a first step and outline in a program that will be undertaken by the dental staff to provide information that will be useful in improving the dental services provided by the Department of Correction to its inmates. The dental staff would like to provide high quality care and will be asking for support at all levels of Administration in working towards that goal. This report will provide a background against which specific reports and recommendations will be made in the near future. The outline presented here begins to show some of the ideas the dentists have developed in conversations together. Details of every phase are certainly not worked out and changes are expected. Continuing growth is hoped for.

We hope that each person who reads this has access to a copy of "Dentistry to Inmates in the North Carolina Department of Corrections"—a "summer study" by Thomas M. Austin and C. David Chapman, two dental students from UNC. Their paper does not represent so many new ideas for the needs of the dental program. It does represent one of the first times a comprehensive report has been submitted in writing. Theirs is an effort welcomed by the dental staff and we endorse its basic tenets completely. It is not seen as an indictment of what has been done but as a constructive report of what still needs to be done.

The status of dental care in the N. C. correctional institutes is inconsistent with the general philosophy of the Correction Department. The philosophy is that inmates in our corrections systems should be given services which are not only adequate to keep them at their entering status but are good enough to improve their ability to function acceptably in society. In most cases, this means services should be better than were available to them on the outside. Just the fact of being incarcerated gives them a negative start.

Specifically in the area of health services, this philosophy should mean that inmates in good health should be maintained and that inmates in poor health should be improved so that their physical ability, self-image and job possibilities are all improved. Good health services are not considered to be a right of people in general society. Inmates will expect no less and will begin to find ways to turn their expectations into demands. The system must stay one step ahead, improving the services along with the expectations. The institution should also recognize its responsibility not only in health services but in health education. Inmates should be given the information needed to protect their own

health and relate to health professionals both inside and outside the prison walls.

Dentistry is one of the important health services and at this time is treated as the poor stepchild of prison health services. Good oral health is a necessity for good general health, for feeling well and for looking well. One of the most important and reliable first glance indications of a persons' socio-economic position is his smile. Poor teeth are a definite handicap to a person trying to find a place in society. Furthermore, dental disease, caries (cavities) and periodontal (gum) disease are the most prevalent chronic diseases. It would be fair to guess that not fifty inmates in the N. C. Correctional Institutions are free of these diseases. It is less difficult for an inmate in our system to get corrective plastic surgery than to get his front teeth restored despite the comparative cost.

Dental services now consist of those given in Central Prison, Polk Youth Center, and Harnett County Youth Center by staff dentists and in all other camps by local dentists working in their own offices. An exception is Women's Prison in Raleigh which has been receiving services by a part-time dentist working about one hour a week in very inadequate prison facilities. It is not easy to determine the adequacy of services given in all the outside camps. Policy seems to be that toothaches are taken care of by extractions. Probably no other services are provided and it can be guessed that even this relief of pain may be very delayed. Our facts are not complete. In the Raleigh area centers, pain relief by extraction is available within 12-72 hours usually. In addition to this, removable dentures are made but the waiting time for these is usually quite long. An insignificant amount of restorative, root canal, gum treatment, preventive and other types dental work is done. Most oral surgical procedures can be provided. The dentist/patient ratio is far too low to consider the possibility of performing a full range of services. Also, present facilities are such that the dentist's time is very inefficiently used. We are suggesting that it is time to elevate our dental program to meet the needs of the inmates.

The long term goals of a good dental program are very briefly:

1. To give good comprehensive dental services to all inmates.
2. To develop a program that will attract the best dental professionals.
3. To provide these services in the most economical way.
4. To establish and maintain ties with educational institutions and with health departments which will contribute towards the above goals.
5. To educate others to our needs and goals.

Short term goals on which we must begin action now are these but not these exclusively:

1. Improving the dental record system.
2. Finding and equipping space for as many as six professional dental personnel—probably four dentists and two hygienists (or three and three) in the Raleigh area so that we can begin to consider getting these personnel. This is the time for this action since a transfer of space is about to be made in the Central Prison facility. A full report on these needs is forthcoming.
3. Institution of a very comprehensive preventive dentistry program. The only way good dental health will be obtainable is by this kind of program. We realize the implications are poorly understood by most non-dental people so we will attempt to explain this in full in the near future. The very first step in this program will be to change prison policy if at all possible so that every inmate will be provided immediately and without the hassle of payment with the simple inexpensive tools he needs to maintain his oral health (proper kind of toothbrush and dental floss).
4. Appointment by the medical director of a director of dental services, or at least, an acting director.
5. Establishment of this dental director as a responsible man with access to all the administrative help available and a man who *must* be contacted when dental decisions are made. A job description should be drawn up as early as

possible subject to approval by Dr. Bell and Dr. Meltzer with input from all interested administrators and dental staff.

6. Establishment of the closest communication between medical and dental staffs by their directors.
7. Development of a rational set of treatment priorities recognizing the need for a preventive dentistry philosophy as well as the fact of limited manpower. It is hoped that the present dental staff can get these priorities clearly delineated very soon.
8. Coordination through the Director's office of all prison dental facilities.
9. Recruitment of dentists to fill all available spaces.
10. Finding of private desk space for the dentists now employed.

The means of accomplishing the long list of goals established above and others that may have been omitted cannot be discussed in detail in this paper but some general discussion is in order. It has been mentioned that specific reports on different aspects will be filed in time.

Preventive dentistry is a philosophy that is, unfortunately, often considered to be a new one. It entails many aspects from fluoridation of the water supply to filmed instructions on proper care of the mouth to regular scaling and polishing the teeth, to early placement of necessary fillings and includes more startling things such as early diagnosis of oral cancer and the potential for saving lives as well as teeth, to the prevention at its best in stopping things before they start and at second best stopping them before they cause loss of function. It has been shown over and over that for a group of people, it is far less expensive to spend most of the effort and money available on good preventive procedures than it is to wait for problems to manifest themselves, then try to repair damage already done. The prison system must make prevention the cornerstone of its dental program. This approach surely includes boosting the manpower force and its efficiency so that proper clinical dentistry can be provided at the best time.

We feel that an improved and continually improving dental program is needed. If we are to get this program we have to have a bright, energetic dental staff and to get and maintain the kind of professional men that are needed, we will have to immediately begin to improve the facilities and show in good faith that the system is devoted to improving services. There is a feedback mechanism. A good program draws good men and good men make a good program. Difficulties with convincing state bureaucracies to move have caused good men to leave or to become discouraged. Administration should try to help the existing staff so that things will get moving again. As the situation is now, positions don't get filled because facilities don't look good, program doesn't look good, and the pay is not high enough of itself to attract anyone to the system. Let's start by getting the program moving. The health of the inmates is at stake.

## DENTAL HEALTH COMMITTEE

### Appendix 3

- To: Zeno L. Edwards, D.D.S., Chairman  
Dental Health Committee, North Carolina Dental Society  
From: E. A. Pearson, Jr., Director  
Dental Health Division  
Subject: 1972-73 Report of Dental Health Division Activities  
1972-73 has been a year of increased emphasis on the prevention of dental disease. In every area of the Division's activity, prevention has been underscored. The following are major developments:  
—Employment of four dental hygienists to work in local health departments and schools, their primary educational focus being prevention. (This was made possible through changes in the Dental Practice Act authorized by the 1971 General Assembly.)  
—Conducting of two regional preventive dental health education workshops for Agricultural Extension Service home economists

- and lay health leaders from 35 counties; these leaders, in turn, are organizing workshops at the county or local levels.
- Work with 4-H Club leaders at state and county levels to instruct them in plaque control methods; this includes prevention education in 4-H summer camps for disadvantaged children.
- Entered into contract with the East Appalachia Project to assist with implementation of community and school water fluoridation in 10 mountain counties. Consultation is also being provided to a team of preventive dental health educators working under the Appalachia Project in 7 mountain counties; the team is teaching prevention to all fifth grades.
- Division staff assisted the Preventive Dentistry Committee with a continuing education course in prevention at Fayetteville Technical Institute, February 3, 1973. Fifty-five dentists and auxiliaries attended.
- With Division assistance one community, Fairmont; and one county, Anson, commenced use of community fluoridation.
- Twenty rural schools added fluorides to the school water supply, thus boosting the state-wide network to 40 systems; expansion is continuing.
- Workshops for training teachers comprehensively in preventive dental health were conducted in two counties, Rockingham and Surry. These demonstration courses will become patterns for other areas. Credit toward certificate renewal has been approved by the Department of Public Instruction for those teachers who take the training.
- The Division continued development of new preventive dental health materials—posters, booklets, brochures, slide series, etc.
- Funded by the National Institute of Dental Research, Division staff initiated fluoride mouthwash studies for all students in three Robeson County schools; the research will be continued for 12 years.
- On behalf of the state's preventive dental health program Dr. E. A. Pearson, Jr. accepted the American Dental Association's first Preventive Dentistry Award at San Francisco, October 29, 1972. (The \$1,000 prize is to be used to purchase preventive program items.)
- Division staff members addressed four national audiences and one regional audience on the subject of the North Carolina preventive dental health program.

In conclusion, it is my opinion that the past year has been one of the most productive in the Division's history. Solid foundations were laid for far-reaching programs which should result in significant reduction of dental disease in the population and a greater demand for professional dental services from the population.

#### DENTAL HEALTH COMMITTEE

##### Subcommittee on Cancer

JEREMIAH N. PARTRICK, *chairman*

E. JEFFERSON BURKES	SIDNEY WOODY
ROBERT W. HOLMES	CLAUDE J. HEARN
LLOYD B. STANLEY	JOHN WARD
WALTER H. FINCH	WILLIAM D. QUARLES
IRVIN A. ROSEMAN	J. W. BARTS
WAYNE ANDERSON	ELIZABETH WADSWORTH
CHARLOTTE W. SUTTON	

**Meetings.** Committee business was conducted by personal contact and through telephone conversation between committee members.

**Assignments.** Continuing education in the field of Oral Cancer and implementation of Oral Cancer Detection Clinics throughout the state.

##### Committee Activities.

1. Presentation of Oral Cancer Detection film produced by the North Carolina Division of the American Cancer Society and the North Carolina Dental Society.
2. Major Oral Cancer Detection Clinic at the North Carolina State Fair October 12-21, 1972.

#### Recommendations.

1. The organization of an Oral Cancer Speakers Bureau.
2. Organization of an Oral Cancer detection lecture group to travel throughout the state to speak to any interested group.
3. Encouragement of Oral Cancer Detection clinics.
4. Exhibition of film and display at all district and state meetings.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

#### DENTAL LABORATORY RELATIONS COMMITTEE

JOHN B. SOWTER (1975), <i>chairman</i>	
HAROLD E. MAXWELL (1973)	JAMES L. COX (1976)
M. W. CARPENTER (1974)	ROBERT A. GEORGE (1977)

There have been no meetings of the Dental Laboratory Relations Committee this year.

On one occasion, the chairman met with two representatives of the North Carolina Dental Laboratory Association to discuss implementation of a proposal developed by the dental practice act subcommittee in 1968-69.

Relations between the North Carolina Dental Society and the North Carolina Dental Laboratory Association appear to be on a sound and high level. No problems have been reported to the committee.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

#### ETHICS COMMITTEE

ROBERT H. GAINNEY, <i>chairman</i>	
JOHN A. S. REYNOLDS (1976)	S. H. ISENHOWER (1974)
JAMES A. PRIVETTE (1975)	W. L. T. MILLER (1973)

**Meetings.** The Committee held no formal meetings. Business of the Committee was conducted by mail and by telephone.

**Assignments.** The Committee received no assignments from the 1972 House of Delegates. Several requests for information and rulings were received and resolved on the district level. One complaint is in process of being resolved in District 1.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

#### FEDERAL DENTAL SERVICES COMMITTEE

R. A. CARNEVALE, <i>chairman</i>	
FREDERICK G. HASTY J. HARRY SPILLMAN	JAMES H. LEE W. ALEX WILLIS

**Meetings.** The Committee held a meeting in February of 1973 with Dr. Joe Pille, Director of the Dental Division of the Veterans Administration of North Carolina, and his associate, Dr. Mason. The meeting was held at the Veterans Administration headquarters in Winston-Salem. A comprehensive review of the current Veterans Administration fee schedule was made and recommendations for changes and alterations have been submitted by the committee to Dr. Pille for presentation to Veterans Administration authorities in Washington, D. C. for analysis and approval. A copy of this report will be made available as soon as appropriate action has been taken by the Veterans Administration officials.

A previous communication from the Executive Secretary of the

North Carolina Dental Society has revealed that the commander of a radar unit installation located outside of Roanoke Rapids has submitted a formal request that the area contiguous to the military area be declared as an area unable to meet the dental demands of the military dependents. A copy of the letter received from Dr. R. A. Daniels from Roanoke Rapids, representing the members of his society, has gone on record to state that, in their opinion, remote area classification is neither necessary nor desirable and they are very much opposed to the implementation of any such program.

No additional progress has been made in lifting remote area restrictions to the Goldsboro-Fayetteville area. Certain efforts are being extended in this direction; however, a full report on progress is not available at the present time.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

#### HOSPITAL DENTAL SERVICE COMMITTEE

R. DONALD COFFEY, Jr., *chairman*

ERNEST W. SMALL

JACK A. MENIUS

WILLIAM J. PORTER

W. ROBERT CAVINESS

THEODORE R. OLDENBURG

Meetings. No formal committee meetings have been held.

Assignments. None

**Activities.** A) It is noted that the previous Hospital Dental Service Committee had established consultants to the ADA Council on Hospital Dental Service for use by the Joint Commission on Accreditation of Hospitals for evaluation of local hospital dental service plans; however, the use of these consultants is not accepted at this time by the Joint Commission on Accreditation of Hospitals.

B) The primary activity of the Committee was its preparation of a survey that could be useful in evaluation of strengths and weaknesses of hospital dental services state wide. The purpose of the survey will be fourfold:

To determine the availability of emergency hospital dental services to the public and of facilities to the practitioner.

To identify those areas where the capability for dental services, especially in the operating room, is deficient or lacking.

To determine the need for continuing education courses in hospital dental care.

To provide assistance and guidance when necessary in helping to establish hospital dental services.

A copy of the proposed survey is attached.

An appropriate resolution appears at the end of this report.

#### Resolutions

**12. Resolved,** that the 1973-74 Committee on Hospital Dental Service be authorized and directed to conduct the survey among members of the North Carolina Dental Society.

#### HOSPITAL DENTAL SERVICE COMMITTEE Survey of Hospital Dental Service and Dental Emergency Care

#### Appendix 1

1. City in which you now practice .....
  2. Is there a hospital serving your community? .....
  3. Name of your hospital .....
  4. Does your hospital have a Hospital Dental Service or Department of Dentistry? .....
  5. Are you a member of the staff in your hospital? .....
  6. Is there a dental suite in your hospital? .....
  7. Are there facilities in the operating room to provide dental care? (complete dental care, not just surgical) .....
  8. Would you prefer to treat all after-hours emergencies in the hospital setting rather than in the private office setting? .....
  9. Is your Hospital Dental Service approved by the ADA? .....
  10. Does your local dental society have an emergency call list? .....
  11. Does your hospital emergency room have a dental emergency call list? .....
  12. How many times in the last year were you called to the hospital to provide emergency dental care? .....
  13. How many times in the last year would you have liked to use the operating room to provide dental care? .....
  14. How many times in the last year did you use the operating room to provide dental care? .....
  15. Reasons for not providing hospital dental care. Check one or more. Inadequate facility .....
- Lack of training .....
- Don't care to get involved .....
16. Would you be interested in taking a continuing education course in the management of the hospitalized dental patient? YES ..... NO .....
  17. Would you and others in your community like assistance in establishing a Hospital Dental Service? YES ..... NO .....
  18. Type of practice you are engaged in:

General Practice .....	Public Health Dentistry .....
Endodontics .....	Oral Pathology .....
Pedodontics .....	Oral Surgery .....
Periodontics .....	Orthodontics .....
Prosthodontics .....	Dental Education .....
  19. Additional comments  
(To return questionnaire, just fold and staple.)

## INSURANCE COMMITTEE

J. S. D. NELSON, <i>chairman</i> (1973)	
DERWOOD L. ASHWORTH (1974)	JOHN S. DILDAY (1976)
THOMAS L. BLAIR (1975)	DONALD E. BLAND (1977)

Meetings. The Committee held meetings May 14, 1972 and September 24, 1972.

**Assignments.** To review experience of Society sponsored insurance programs and recommend changes as needed.

**Results.** A statistical review of all programs was made and inspected at the May 14, 1972 meeting.

On September 24, 1972 the Committee met at Charlotte with our insurance consultant, Mr. Harvey Sarner, at which time he suggested certain changes which the Committee voted to adopt. These changes were presented to the Executive Committee at its October 8, 1972 meeting at Greensboro at which time they were approved (see pages 10-11 of the Blue Book).

The Committee is presently working toward implementation of the proposed changes.

### Resolutions

This report is informational in nature and no resolutions are submitted.

## LEGISLATIVE COMMITTEE

MOTT P. BLAIR	
THOMAS B. REID, JR.	GEORGE G. DUDNEY
CHARLES T. BARKER	

The 1972 House of Delegates approved a specialty licensure bill to be submitted to the 1973 General Assembly for ratification.

The bill was introduced by Representative Robert L. Farmer of Wake County. It is HB679 and bears the short title of Specialty Licensure of Dentists. It was referred to the House Health Committee. Mrs. Nancy Chase of Goldsboro, chairman.

On March 29 the committee reported favorably on the bill but the vote was not unanimous. Several members of the committee indicated that they would probably vote against the bill on the floor of the house.

Effort is being made to request dentists to contact their representatives personally or by telephone and ask for their support of the bill when it is considered by the house. At present it appears that the bill has a 50-50 chance of being ratified.

Dr. William G. Schneider, Dr. Ralph A. Young, Mr. Andrew M. Cunningham and Mr. R. C. Howison attended the March 29 hearing in behalf of the bill.

Many of the legislators on the committee did not understand the intent of the bill and none expressed concern over the paragraph which reads: "neither this act nor the rules and regulations of the Board shall prohibit a dentist who is generally licensed from restricting his practice to any area or areas of dentistry."

### Resolution

This report is informational in nature and no resolutions are submitted.

### Short Title: Specialty Licensure of Dentists

### HB 679

Sponsored by: Representative Farmer

## A BILL TO BE ENTITLED

AN ACT AMENDING ARTICLE 2 OF CHAPTER 90 OF THE GENERAL STATUTES WITH REGARD TO SPECIALTY LICENSURE OF DENTISTS.

The General Assembly of North Carolina enacts:

Section 1. Article 2 of Chapter 90 of the General Statutes is hereby amended by inserting a new section immediately after

G.S. 90-29.4 to be numbered G.S. 90-29.5 and to read as follows:

"G.S. 90-29.5—Specialty License. (a) A dentist shall not announce or hold himself out to the public as limiting his practice to, or as being especially qualified in any branch of dentistry except in those areas for which specialty licensure is hereinprovided and then only after having obtained a specialty license therefor from the North Carolina State Board of Dental Examiners, referred to hereinafter as "Board." The Board shall, subject to its rules and regulations not inconsistent herewith issue specialty license to those meeting the qualifications therefor herein-after set forth in the following specialties, and such other specialties as may hereafter be recognized by the Rules and Regulations of the Board.

Oral Surgery  
Orthodontics  
Pedodontics  
Periodontics  
Prosthodontics  
Oral Pathology  
Endodontics  
Dental Public Health

The Board may by its rules and regulations withdraw recognition of any of the foregoing enumerated specialties or those which it has recognized pursuant to this section for the purpose of specialty licensure. Such withdrawal of specialty recognition, however, shall be prospective only and shall not deprive those theretofor licensed in such specialty of such license or of the right to annual renewal thereof pursuant to Section 31 of this Chapter.

The Board shall promulgate and set forth definitively in its rules and regulations the conduct, activities, and communications of a dentist which shall not constitute or be considered the announcing or holding of oneself out to the public as limiting one's practice to or being especially qualified in those specialty areas of dental practice for which specialty licensure is required.

To qualify for a specialty license in any of the foregoing, or in the specialties hereafter recognized by Rules and Regulations of the Board, an individual must:

- (1) Have currently in effect a license to practice Dentistry in North Carolina or have currently in effect a license duly granted by some other state of the United States or by the District of Columbia to practice general dentistry in that jurisdiction and have met the qualifications for licensure in North Carolina pursuant to G.S. 90-30 except for the examination provisions thereof;
- (2) Meet the educational and training requirements for such specialty as promulgated by the Rules and Regulations of the Board;
- (3) Satisfactorily pass an examination given by the Board in his specialty for which the applicant seeks specialty licensure;

Provided, however, that any dentist duly licensed by the Board for the general practice of dentistry who prior to the effective date of this Act has limited his practice to any of the above listed specialties, shall be entitled to a specialty license from the Board upon application to the Board in such specialty without the necessity of complying with the qualifications for specialty licensure set forth above.

(b) The holder of a specialty license shall be subject to the provisions of Section 90-41 of this Article.

(c) A dentist duly licensed in North Carolina both for the general practice of dentistry and in a specialty may at any time surrender his specialty license and resume the general practice of dentistry.

(d) Neither this act nor the rules and regulations of the Board shall prohibit a dentist who is generally licensed from restricting his practice to any area or areas of dentistry.

### Section 2.—Amend G.S. 90-39 as follows:

(a) By inserting a new sub-section (2) thereof reading as follows:

- "Each application for specialty examination \$150.00"
- (b) By inserting the words "or specialty" following the word "dentistry" in line 1 of present sub-section (2) thereof.
- (c) By renumbering present sub-sections (2), (3), (4), (5), (6), and (7) as (3), (4), (5), (6), (7) and (8).
- (d) By adding the following paragraph at the end of said Section:

"Provided, however, that where a fee is paid for the renewal of a specialty license there shall be no fee charged for the renewal of the general practice license of such practitioner."

**Section 3.** Amend G.S. 90-41 (f) by inserting the words "specialty licensees" and a comma following the word "licensees," in line 1 thereof.

**Section 4.** Amend G.S. 90-41.1 by adding a new sub-section thereto to read as follows:

(d) The terms 'licensee' and 'license' as used herein include specialty licensee and specialty license."

#### LONG RANGE PLANNING COMMITTEE

J. B. FREELAND (1976), *chairman*

R. B. BARDEN (1973) A. C. CURRENT, JR. (1975)  
JAMES A. HARRELL (1974) J. HARRY SPILLMAN (1977)

GERALD M. CATHEY, *Consultant*

The Long Range Planning Committee convened on Thursday, January 25, 1973 at the Charlotte Athletic Club in Charlotte, North Carolina at 4:00 p.m. and adjourned at 9:15 p.m.

On December 26 letters were directed to selected leaders in dentistry requesting such advice and counsel that would be pertinent to the growth and development of the North Carolina Dental Society for the immediate years ahead.

Responses were received from Drs. James W. Bawden, Dean, UNC School of Dentistry; Joseph M. Johnson, President, North Carolina Dental Society; Fred Hasty, Chairman, Executive Committee, North Carolina Dental Society; Hogan Gaskins, President, North Carolina State Board of Dental Examiners; Ralph D. Coffey, Chairman, Delegates to the American Dental Association; and William L. Hand, past president of the North Carolina Dental Association.

All members of the committee were present: Drs. Barden, Cathey, Current, A. C., Jr., Harrell, Johnson, J. M., Spillman and Freedland.

#### A. Membership:

It would be desirable and valuable to provide some mechanism to insure that all new members in the North Carolina Dental Society receive an orientation in the organizational structure of the American Dental Association, the state and district societies prior to induction into membership.

#### Recommendation:

1) That every graduate of the UNC School of Dentistry receive a planned program of orientation stressing the aims, goals, purpose, and obligations of membership in organized dentistry.

a) It is further suggested that a committee of at least two members approach each licensed non-member to extend an invitation to join the NCDS, and a report of this effort be made through each district to the Chairman of Membership of the State Society.

b) The President of the State Society be instructed to meet with his counter part in the Old North State Dental Society to explore the possibility of both Executive Committees to meet jointly to determine how they can best serve the interest and needs of dentistry in this state.

c) All new members inducted into our State Society be required to receive some instruction relative to their responsibilities toward organized dentistry and the benefits that accrue from such membership.

#### B. Executive Committee:

The Executive Committee should provide the necessary mechanism to inform the House of Delegates of the NCDS and the membership at large of the activities of the Delegates of the American Dental Association from our State Society.

#### Recommendations:

1) That a resume of the report of the ADA Delegates to the Executive Committee be published in the Newsletter or any other appropriate medium for the edification of the general membership and that this recommendation be expanded to include:

a) An outline of assigned or implied duties of each delegate and

b) That the report to the House of Delegates from the Chairman of the NCDS Delegation include in his report the effectiveness and functioning of each delegate.

2) That the Editor of the North Carolina Dental Journal be an elective office and should carry with such election full voting privileges on the Executive Committee. It is further suggested that the Editor should serve a term of three years.

#### C. Organizational Efficiency:

A responsibility of the president of the society is to oversee the effective implementation of all resolutions passed by the House of Delegates. He should report to the next House of Delegates the final disposition of all such resolutions. It is of significance to the State Society to have such resolutions under systematic review to ensure that approved plans and programs have either official termination or assured continuity.

#### D. Ethics:

The image of dentistry is affected by the manner in which we serve the needs of both the public and the practicing profession. The current mechanism for evaluation and judgment in the areas of grievances has failed to achieve either its intent or purpose.

#### Recommendation:

It is essential that each component society's Ethics Committee be responsible for establishing a Grievance Committee in each district and/or local society. There should be a provision for liaison with the Grievance Committee and its immediate Ethics Committee which in turn should maintain liaison with the state Ethics Committee.

#### E. State Board of Dental Examiners:

##### Recommendation:

It would be in the best interest of the citizens of North Carolina, the dental profession, and all others concerned, if the tenure of members of the State Board of Dental Examiners be limited to two successive terms. Implementation of this recommendation could be facilitated by the Executive Committee taking a position on this reference and that such position be published in communications disseminated to the general membership indicating terms of office presently in effect.

#### F. Dental Laboratories:

##### Recommendation:

To facilitate the protection of the public, it is essential and desirable that all dental laboratories be registered by the North Carolina State Board of Dental Examiners. Every effort should be expended for this provision to be included in the statutes governing dental practice at the earliest possible moment.

#### G. Auxiliaries and Expanded Duties:

It is the opinion of this Committee that changes in the current Dental Practice Act should be sought that would insure its ability to withstand tests of its constitutionality and that would allow research, investigation and experimentation to be conducted under competent leadership and supervision.

#### Recommendation:

That expanded duties of auxiliaries be explored to determine

how we may better serve the dental needs of the citizens of our state. It is further recommended that changes in the Dental Practice Act be encouraged to secure the best data to resolve the present differences that currently exist in our state.

#### H. Membership Identification:

##### Recommendations:

- 1) All limited practitioners be listed in the NCDS Directory.
- 2) That the Executive Committee establish a committee for the purpose of acquiring photographs of all members of the NCDS for inclusion in the NCDS Directory.

#### I. Preventive Dentistry Program:

The Long Range Planning Committee views with favor the Preventive Dentistry Program for North Carolina and urges its immediate implementation.

#### J. Representation on Local, State and Federal Agencies:

The responsible leadership in our Society should make every effort to secure dental representation on all boards and/or committees that are directly or indirectly related or associated with dentistry.

#### Resolutions

This report is informational in nature and no resolutions are submitted.

### LONG RANGE PLANNING COMMITTEE

#### Subcommittee on Redistricting

CHARLES W. HORTON, *chairman*

C. E. CRANDELL, JR.

JAMES E. GRAHAM, JR.

ROBERT B. LITTON

W. KENNETH YOUNG

WALTER H. FINCH, JR.

The Committee for Redistricting submitted to the 1972 House of Delegates a report (appendix I and 2) with the hope that additional commentary from the delegates could be elicited. Some comments pro and con have been received but are inconclusive.

In the absence of clear direction, the committee wishes to receive further direction from the House of Delegates knowing that redistricting would be tremendously complex. Several years would be required to effect the change and implementation would require great effort.

The primary question now to be decided is one of philosophy and not of mechanism of action. To this end the committee wishes to submit the following resolution before any further efforts are required of the committee.

#### Resolution

**13. Resolved**, that the House of Delegates approve in principle redistricting of the North Carolina Dental Society and requests Subcommittee on Redistricting and the Long Range Planning Committee to proceed with formalization of plans to effect the changes necessary, and be it further

**Resolved**, that when the plans are formalized they shall be submitted to the House of Delegates for final approval.

### LONG RANGE PLANNING COMMITTEE

#### Subcommittee on Redistricting

#### Appendix 1

#### Excerpts from the report of the Subcommittee on Redistricting to the 1972 House of Delegates

**Recommendation:** That a Committee representing each of the districts be established to review and study the present structure for the purpose of evaluating:

1. The geographic convenience and compatibility of membership.
2. Communication and administrative efficiency with the district and the State Society.
3. Representation.
4. Overall achievement of the functions generally ascribed to district level activities.

**Committee Action:** The Committee for Redistricting has not completed its study but in answer to the above assignments by the Long Range Planning Committee, the following guidelines have been established.

1. Geographically, the size of the components will be reduced, and attendant with this of course, will be a corresponding increase in the number of component societies. Convenience of transportation and compatibility of various cities and counties is an important consideration. The multi-county planning areas as designated by the State Government will be useful to some degree in establishing boundaries for new components.
2. At present, a wealth of information is sent to the secretaries of component societies from the ADA and the State Society. From this point on, it is dead end. The component society officers have no method by which they can reach the members with this information.

By the same token, the reverse is true. There is no realistic way in which the component officers can gather information in their districts because they are too large. Communication is somewhat ineffective in both directions. Communication and administrative efficiency can be improved with more compact components. The Committee feels that component societies should have the opportunity to meet at least quarterly.

3. Representation in the House of Delegates for each component society should be governed, within reason, according to the number of dentists in each component. The Committee feels that components should be somewhat more equal in size in terms of numbers of dentists, but that they should not be rigidly limited.
4. In the past, the component societies have performed their duties as well as was possible under the conditions prevailing. Component societies as now constituted are not viable local organizations. The proliferation of local societies unassociated with organized dentistry has usurped most functions generally ascribed to district level activities.

The Committee feels our Society needs component organizations capable of rapid, decisive action to deal with government and third party agencies. Many problems for dentistry are in the making. The only answer is to credit the necessary machinery to cope with the multitude of problems—some of which there is yet little awareness on the part of the profession.

**Commentary:** The Committee is well aware of the far reaching effects and the difficulties involved in redistricting the State Society. 1921 was the year the Society last formed new districts. Needless to say, great changes have occurred since that time. Large concentrations of population have developed rapidly in some areas with only moderate growth in other areas. The only thing we can be sure of is change and we must accommodate.

The Committee realizes that we are comfortable with the old structure of the districts and that such is sentimental and traditional will tend to influence the thinking of the delegates.

The Constitution and Bylaws, method of election of State Officers, and many other changes will be in the offing. Old alliances must be broken and new ones formed.

The Committee can only hope the delegates will face the future with an open mind and do what is necessary to improve the organizational structure of dentistry to make even greater progress possible.

### LONG RANGE PLANNING COMMITTEE

#### Subcommittee on Redistricting

#### Appendix 2

#### Excerpts from the report of the Subcommittee on Redistricting to the 1972 House of Delegates

The Committee for Redistricting wishes to bring to the attention of the membership the five district geographic boundaries

which now compose the North Carolina Dental Society. With only minor changes these districts have existed with these boundaries since 1921.

The number of members of the North Carolina Dental Society located within these component societies is as follows:

First District .....	280
Second District .....	370
Third District .....	353
Fourth District .....	237
Fifth District .....	223

On the attached map please note their present size makes it impossible for the district societies to function for the purposes for which they are assigned to perform.

The Committee wishes also to bring to the attention of the membership a second map with proposed districts. There are nine districts labeled, A, B, C, D, E, F, G, H, I. All districts are smaller in terms of geographic size.

The Committee wishes to solicit any and all comments from the membership of the Society concerning specific local situations which might be helpful in the formation of new districts. We wish to emphasize that the new district lines are only tentative and are by no means rigidly fixed to date. The Committee readily admits that we do not yet possess all the information necessary to draw new district lines which would best serve the interest of all local areas. For this information we must depend upon the membership for guidance.

Please use the map to designate any changes you feel should be made and state the reasons why you feel this would be of benefit to the Society in the particular area in which you are interested.

Listed below are the number of licensed dentists in the designated areas.

A 155	D 140	G 204
B 190	E 266	H 190
C 204	F 165	I 177

Help and suggestions from all members of the North Carolina Dental Society is earnestly solicited by the Committee.

#### MEMBERSHIP COMMITTEE

ROBERT B. LITTON, *chairman*

RICHARD P. BELTON                    WALTER S. MORRIS, JR.  
CLARENCE F. BIDDIX                    E. BEN WARD  
DARDEN J. EURE, JR.

**Membership Gain in 1972.** As of December 31, 1971 the Society had 1535 active and life members. On December 31, 1972 Society membership totalled 1576 a gain of 41 members during that calendar year. During 1972 the Society accepted 82 members and lost 41. A breakdown of the losses follows:

Resigned	7
Deceased	17
Dropped from the roll	9
Moved out-of-state	3
Retired	5
	41

Of the 7 who resigned 6 entered graduate school and 1 entered military service.

#### Resolution

**14. Resolved,** that it be made a matter of record that the following were dropped from the roll December 31, 1972 for non payment of dues in accordance with Article VI, Section 6 of the *Bylaws*:

First District: Earl R. Dolbee, Hendersonville; Jerald M. Snyder, Weaverville.

Second District: Alfred D. Hurt, Jr., Monroe; Thomas A. Mack, Charlotte.

Third District: Vaughn E. Bullard, Laurens, South Carolina; Louis B. Guy, Chapel Hill.

Fourth District: R. M. Blackman, Selma; Robert E. Brooks, Fayetteville.

Fifth District: Glenn E. Minah, Ann Arbor, Michigan.

#### NCD-PAC COMMITTEE

HAROLD E. MAXWELL, *chairman*

JERRY F. WOOD                    HAL P. COCKERMAN  
J. R. COOLEY                    B. W. WILLIAMSON  
MOTT P. BLAIR                    WILLIAM G. QUARLES  
WILLIAM H. GRAY, JR.            FRANCIS A. BUCHANAN  
L. C. HOLSHouser                THOMAS B. REID, JR.

**Meetings.** The Committee held an organizational meeting on September 9, 1972.

Legislation and administrative regulations are affecting the scope and future of the practice of dentistry. The profession owes it to itself and its patients to help elect the men and women of both political parties who will shape that legislation. This is best done by getting involved in the electoral process. The North Carolina Dental Political Action Committee—NCD-PAC—was formed to help dentistry's voice be heard in the state legislature and the national congress.

Time was allotted at each district meeting for promotion of interest in this endeavor by the chairman and committee members. Response has been very favorable. Realizing the concern that the leadership of dentistry in North Carolina has in this effort, the following resolution is offered.

#### Resolution

**15. Resolved,** that the House of Delegates endorse the efforts of NCD-PAC and encourage 100 per cent participation by the North Carolina Dental Society membership.

#### PREVENTIVE DENTISTRY COMMITTEE

RALPH A. YOUNG, *chairman*

M. W. ALDRIDGE                    FRED H. MILLER  
J. FRED SPROUL                    CARLE W. MASON  
CLAUDE W. DRAKE

**Meetings.** The Committee held meetings on October 3, 1972; November 29, 1972; and January 24, 1973. Subcommittees met as necessary to perform assigned tasks.

**Assignments.** The 1972 House of Delegates adopted the following resolutions: (Trans. 1972-85-86)

**"Resolved,** that the Preventive Dentistry Committee pursue funding of its statewide community based programs in the next state legislature."

**"Resolved,** that the Preventive Dentistry Committee continue to promote continuing education opportunities regionally across the state to assist practicing dentists in establishing meaningful in-office preventive programs based on the latest techniques."

**Activities.** The Committee developed a statewide network of support among dentists, other professions and lay groups and individuals for preventive dentistry appropriations bills to be initiated by the North Carolina Dental Society.

The Committee held one continuing education seminar on preventive dentistry. The seminar was held at the Fayetteville Technical Institute, Fayetteville, North Carolina on February 3, 1973. The seminar was attended by 55 dentists and their auxiliaries. Eleven Society members acted as faculty for this seminar.

The Committee worked closely with the Executive Director and the Board of Directors of Delta Dental Plan of North Carolina, Inc., to insure the inclusion of preventive dental services in packages offered by Delta Dental Plan. A subcommittee has been appointed to work continuously in this capacity.

#### Resolution

This report is informational in nature and no resolutions are submitted.

## REGIONAL BOARD STEERING COMMITTEE

ROGER E. BARTON, *chairman*

R. H. WATSON

C. W. POINDEXTER

**Meetings.** No formal meetings were called of this Steering Committee during the term that this special committee was activated. However, one member of the Committee attended the Southern Conference of Dental Deans and Examiners on January 6 and 7, 1973.

**Assignments.** The 1972 House of Delegates adopted the following resolution: (29-1972-H)

"Resolved," that the president of the North Carolina Dental Society direct the Dental Practice Act Committee in conjunction with the State Board of Dental Examiners to study the feasibility of changes to the Dental Practice Act to permit more flexibility in granting licenses and to propose such changes if any at the House of Delegates 1973, and be it further

**Resolved,** that the President of the North Carolina Dental Society appoint a committee to continue the study of an evaluation of the national or regional testing service and make recommendations, at the appropriate time, to the House of Delegates concerning the involvement of North Carolina in such a testing service.

**Results.** The Regional Board Steering Committee of 1971 prepared a report endorsing the concept of a Regional Testing Center and listed 7 opinions of the Committee at that time. The present Committee consisting of the same members as the 1971 Committee again endorses this concept and wishes to reemphasize the 7 opinions previously transmitted.

The Chairman of the Committee attended the Southern Conference of Dental Deans and Examiners in Augusta, Georgia in January of 1973 at which time a subcommittee of that Conference submitted to that body a Southern Regional Testing Agency Constitution and Bylaws. The Constitution states "The objectives of this agency shall be to provide resource data to participating state boards through the development and administration of uniform tests in the clinical aspects of dentistry and oral hygiene." The document drew a number of comments from participants at the Conference, and finally a motion was made and adopted that the document with comments be received by the Southern Conference of Dental Deans and Examiners and that the document be made available to all state board members of the Southern Conference of Dental Deans and Examiners. A coordinating mechanism was established within the Conference to encourage the individual state boards to review the document and to begin discussion on the implementation of a Southern Regional Testing Agency.

The conference took the view that it was time action was taken on this subject since it had been in the discussion stages for several years. Since the Southern Conference of Dental Deans and Examiners appears presently to be the motivating force behind the establishment of a Southern Regional Testing Agency and since they have requested meetings between the various state boards within the area, the Committee is of the opinion that the North Carolina Dental Society should encourage the North Carolina State Board of Dental Examiners to participate in structuring such an agency and the accompanying clinical examination protocol.

The Committee also recommends that the members of the Dental Practice Act Committee and the State Board of Dental Examiners renew efforts to propose changes in the Dental Practice to permit flexibility in granting licenses to allow the utilization of clinical examinations administered by a regional or national testing agency.

### Resolution

**16. Resolved,** that the House of Delegates of the North Carolina Dental Society encourage the North Carolina Board of Dental Examiners to actively participate with interested states in the region in the formulation and activation of a Southern Regional Testing Agency.

## RELIEF FUND COMMITTEE

W. L. HAND, *chairman*

S. E. MOSER

J. W. HEINZ

S. L. BOBBITT

J. T. LASLEY

**Assignments.** The President of the North Carolina Dental Society directed the Relief Fund Committee of the North Carolina Dental Society (1) to investigate the possibilities of utilizing the Relief Fund assets to build a building to house the Dental Society offices, (2) to keep the grants comparable to the increased cost of living.

**Results of Study.** Authorization has been granted to utilize the service of legal counsel in connection with matters related to the Relief Fund Indenture of Trust.

This report will be available to the Executive Committee upon completion.

An adjustment of grants has been made in accordance with the increased cost of living.

### Resolutions

This report is informational in nature and no resolutions are presented.

## Resolutions

### SUBMITTED BY THE EXECUTIVE COMMITTEE AND DELEGATES

#### Executive Committee DUES INCREASE

At its meeting February 17, 1973 the Executive Committee voted to submit the following resolution to the House of Delegates:

#### Resolution

**17. Resolved,** that Section 1 of Article VI of the *Bylaws* be amended by deleting the words and figures "fifty (\$50.00) dollars" in the first sentence and substituting therefor the words and figures "seventy (\$70.00) dollars."

#### Executive Committee RESOLUTIONS ON LONG RANGE PLANNING COMMITTEE REPORT

At its meeting March 4, 1973, the Executive Committee reviewed with interest the report of the Long Range Planning Committee. After careful study of the recommendations submitted in the report the Executive Committee presents the following resolutions:

**18. Resolved,** That District Vice Presidents be urged to make a concerted effort to secure membership of all dentists licensed to practice in North Carolina.

**19. Resolved,** That a resume of the report of the ADA Delegates be published in the *Newsletter* or any other appropriate medium, and be it further

**Resolved,** That the report include an outline of assigned or implied duties of each delegate and the effectiveness and functioning of each delegate.

**20. Resolved,** That nominations for members of the State Board of Dental Examiners be made at the second General Session during the Annual Meeting of the Society with the understanding that this would not preclude further nominations as provided under State law.

**21. Resolved,** That the Dental Laboratory Committee, in consultation with the North Carolina Dental Laboratory Association, develop a mechanism for the registration of dental laboratories in this State, and be it further

**Resolved,** That this mechanism be submitted to the House of Delegates for approval.

**22. Resolved,** That avenues, other than changes in the Dental Practice Act be explored to allow research, investigation, and

experimentation in the use of expanded duties auxiliaries, and be it further

**Resolved,** That the UNC School of Dentistry be encouraged to consider following the plans for the training of expanded duty auxiliaries currently existing in the State of Virginia.

#### Executive Committee HONORARY MEMBERSHIP

At its meeting February 17, 1973, the Executive Committee voted to recommend to the House of Delegates, that Dr. C. Gordon Watson, Executive Director, American Dental Association be elected to honorary membership in the North Carolina Dental Society. An appropriate resolution is presented herewith.

**23. Resolved,** That C. Gordon Watson, D.D.S., Executive Director, American Dental Association, be elected to honorary membership in the North Carolina Dental Society.

#### RESOLUTION SPECIALTY REPRESENTATION

Delegate, E. U. Austin

**Background Information.** The specialties of dentistry in North Carolina are an integral part of the practice of dentistry in North Carolina. This House of Delegates on occasion are concerned with matters that vitally concern the specialty practice in our State. On such occasions and others the input by these disciplines would be helpful in the deliberations of the body. Therefor, the following resolution is submitted.

**25. Resolved,** that the specialties that have organizations within our State be invited to send an official representative to this body with the privilege of the floor without a vote.

#### RESOLUTION

Tribute to James Wyatt Bawden, D.D.S.

James Wyatt Bawden, D.D.S., Dean of the School of Dentistry, University of North Carolina, has endeared himself to the profession of dentistry in North Carolina; and the North Carolina Dental Society makes the following resolution a part of the records of the proceedings of the 117th Annual Session and the House of Delegates.

## Report of Delegation to A.D.A.

RALPH D. COFFEY (1974) chairman

ERBIE MEDLIN  
(1973)

ROY L. LINDAHL  
(1975)

JOSEPH M. JOHNSON  
(1973)

M. W. ALDRIDGE  
(1975)

PEARCE ROBERTS, JR.  
(1975)

EDWARD U. AUSTIN  
(1974)

The North Carolina delegation to the American Dental Association met in caucus Saturday, October 28, 1972, at 3:00 p.m. in the Hospitality Suite of the North Carolina Dental Society in the Fairmont Hotel, San Francisco, California. All delegates and officers of the Society were present except Dr. Pearce Roberts, Jr. Dr. James A. Harrell was moved to delegate to replace Dr. Roberts and Dr. Robert J. Shankle was made Acting Secretary of the North Carolina Dental Society for the forthcoming A.D.A. Sessions. The delegation continued the review of resolutions, candidates, invitations and other business.

On Saturday morning, October 29, the delegation met in caucus with the Fifth Trustee District Organization. Dr. Aldridge and Dr. Medlin were assigned as chairmen of their respective Reference Committees by Chairman Pattishall. Dr. Edward U. Austin was elected as chairman of the Fifth Trustee District Organization.

All delegates and alternates were present at all sessions of the House of Delegates.

On Monday morning, October 30, the Reference Committee hearings were held.

Whereas, the North Carolina Dental Society and its membership have enjoyed a position of leadership in dental health care on the national level, and

Whereas, the University of North Carolina School of Dentistry is an internationally known institution of excellence in teaching, service and research with exceptional equal, and

Whereas, this reputation is a reflection on the dedication of the membership of the oldest dental society in the nation as it works in concert with the chief administrator of the University of North Carolina School of Dentistry and his faculty, and

Whereas, the North Carolina Dental Society recognizes the efforts of Dean Bawden and his faculty to produce a superior dental health service to the people of North Carolina and this nation by vision and innovation.

**41. Resolved,** that the North Carolina Dental Society award a vote of confidence and appreciation to James Wyatt Bawden, D.D.S., Dean of the University of North Carolina School of Dentistry, a man of vision, integrity, dedication, wisdom and compassion, and be it further

**Resolved,** that copies of this resolution be transmitted to: The Honorable James E. Holshouser, Jr., Governor of North Carolina and Chairman, Board of Trustees of the University of North Carolina; William C. Friday, President, Consolidated University of North Carolina; N. Ferebee Taylor, Chancellor, University of North Carolina at Chapel Hill; Cecil G. Sheps, Vice Chancellor for Health Affairs, University of North Carolina; C. Gordon Watson, Executive Director, American Dental Association; and, James W. Bawden, Dean, School of Dentistry, University of North Carolina.

#### PROVISIONAL LICENSURE FOR DENTAL HYGIENISTS

Delegate, M. W. Aldridge

Whereas, the present requirements for provisional licensure of Dental Hygienists impose hardships on many hygienists graduating from schools out of our state, therefore, be it

**42. Resolved,** that the House of Delegates of the North Carolina Dental Society strongly urge the N. C. State Board of Dental Examiners to eliminate or severely reduce the 3 year requirement for Provisional Licensure of Dental Hygienists.

The delegation met in caucus with the Fifth District Organization on Tuesday, October 31, at 2:00 p.m. Reports were heard from each of the Reference Committee Chairmen. Drs. Medlin and Aldridge made their reports. I was recognized before adjournment and paid tribute to a most worthy and dedicated delegate, Erbie Medlin, this being his last year as a delegate.

The final caucus of the delegation was held Thursday evening, November 2, upon adjournment of the final session of the House of Delegates. A review of attendance in the Hospitality Suite was discussed. The flow of people, location, size and service will be given the delegation for next year. I was asked to prepare a proposed budget for the meeting in Houston next year and submit it to the Executive Committee which I did. I was also asked to prepare an informative summary of events, meetings and recommendations and give it to the new chairman of the delegation.

Thank you for your confidence in allowing me to serve as chairman for your delegation to the American Dental Association House of Delegates in 1972.

RALPH D. COFFEY, chairman  
North Carolina Delegation

# Actions of House of Delegates

VELVET CLOAK INN,  
RALEIGH, NORTH CAROLINA  
March 31-April 1, 1973

## ADOPTED:

**1-1973-H.** Resolved, that the agenda on pages iii and iv (blue sheets) be adopted as the official order of business for this session of the House of Delegates.

**2-1973-H.** Resolved, that the list of referrals submitted by the Speaker of the House of Delegates be approved.

**3-1973-H.** Resolved, that the report of the Committee on Rules and Order be adopted, and be it further

Resolved, that the report of the Committee on Rules and Order constitute the rules for the proper conduct of business at this session of the House of Delegates.

**4-1973-H.** Resolved, that C. Gordon Watson, D.D.S., Executive Director, American Dental Association, be elected to honorary membership in the North Carolina Dental Society.

**5-1973-H.** Resolved, that the President of the North Carolina Dental Society appoint a Task Force immediately to encourage legislators to enact HB 679.

**6-1973-H.** Resolved, that the members of the North Carolina Dental Society House of Delegates be polled to see whether they approve or disapprove the principle of redistricting the North Carolina Dental Society, and be it further

Resolved, that if the poll results in approval the Subcommittee on Redistricting of the Long Range Planning Committee be directed to proceed with formalization of plans to effect the changes necessary, and be it further

Resolved, that when the plans are formalized they be submitted to the House of Delegates for final approval.

## REJECTED:

**7-1973-H.** Resolved, that the House of Delegates of the North Carolina Dental Society encourage the North Carolina Board of Dental Examiners to actively participate with interested states in the region in the formulation and activation of a Southern Regional Testing Agency.

## ADOPTED:

**8-1973-H.** Resolved, that Section 1 of Article VI of the *Bylaws* be amended by deleting the words and figures "fifty (\$50.00) dollars" in the first sentence and substituting therefor the words and figures "seventy (\$70.00) dollars."

**9-1973-H.** Resolved, that District Vice Presidents be urged to make a concerted effort to secure membership of all dentists licensed to practice in North Carolina.

**10-1973-H.** Resolved, that a resume of the report of the ADA Delegates be published in the *Newsletter* or any other appropriate medium, and be it further

Resolved, that the report include an outline of assigned or implied duties of each delegate and the effectiveness and functioning of each delegate.

## ADOPTED AS AMENDED:

**11-1973-H.** Resolved, that the President of the North Carolina Dental Society inform the members at least annually as to procedure for election to the State Board, and be it further

Resolved, that those persons, at the time of the report, known to be seeking reelection and other candidates be made known to the Society.

## ADOPTED:

**12-1973-H.** Resolved, that the Dental Laboratory Committee, in consultation with the North Carolina Dental Laboratory Association and the North Carolina State Board of Dental Examiners develop a mechanism for the registration and annual re-regis-

tration of dental laboratories and dental laboratory technicians in this State, and be it further

Resolved, that this mechanism be submitted to the House of Delegates for approval.

**13-1973-H.** Resolved, that avenues including but not limited to changes in the Dental Practice Act be explored to allow research, investigation and experimentation in the use of expanded duties auxiliaries.

**14-1973-H.** Resolved, that the report of the Ethics Committee (BB:140) be received for information.

**15-1973-H.** Resolved, that resolution 25-1972-H be postponed indefinitely.

**16-1973-H.** Resolved, that resolution 27-1972-H be postponed indefinitely.

## ADOPTED AS AMENDED:

**17-1973-H.** Resolved, that Section 1 of Article III of the *Constitution* be deleted and the following substituted therefor:

Section 1. The membership of this Society shall consist of the following classifications: Active members, Life members, Student members, Honorary members and retired members, and be it further

Resolved, that Article III of the *Constitution* be amended by the addition of the following section:

Section 6. A resident of North Carolina who is an undergraduate of a dental school accredited by the State Board of Dental Examiners, and any undergraduate dental student at the University of North Carolina shall be eligible for student membership in the Society, provided he is a student member of the American Dental Association, and be it further

Resolved, that Article V of the *Bylaws* be amended by the addition of the following section:

Section 4. Student members shall receive annually the *NORTH CAROLINA DENTAL JOURNAL*, the price of which shall be included in their annual dues. They shall be entitled to attend all meetings of the Society, but they shall not be eligible for office or priviledged to vote, and be it further

Resolved, that Article VI of the *Bylaws* be amended by the addition of the following section:

Section 9. The annual dues of student members of the Society shall be four dollars (\$4.00).

## REFERRED TO CONSTITUTION AND BYLAWS COMMITTEE:

**18-1973-H.** Resolved, that Section 6 of Article I of the *Bylaws* be deleted and the following substituted therefor:

Section 6. In the event the office of President becomes vacant, the President-Elect shall become President for the unexpired portion of the term, after which he shall serve a full term as President. In the event both the offices of President and President-Elect become vacant, the Vice President shall become President for the unexpired portion of the term. In the event the office of President-Elect becomes vacant, the President for the ensuing year shall be elected at the next annual session of the Society in accordance with Chapter IV of the *Bylaws*. A vacancy in the office of Vice President or in the office of Secretary-Treasurer shall be filled for the unexpired portion of the term by a majority vote of the Executive Committee.

## ADOPTED:

**19-1973-H.** Resolved, that Mr. Andrew M. Cunningham and the staff members of the administrative staff of the North Carolina Dental Society be commended for their dedicated and efficient efforts in fulfilling their duties in the conduct of the administrative affairs of our Society.

**20-1973-H.** Resolved, that the Blue Shield Subcommittee be eliminated.

**21-1973-H. Resolved**, that it be made a matter of record that the following were dropped from the roll December 31, 1973 for non-payment of dues in accordance with Article VI, Section 6 of the *Bylaws*:

First District: Earl R. Dolbee, Hendersonville; Jerald M. Snyder, Weaverville.

Second District: Alfred D. Hurt, Jr., Monroe; Thomas A. Mack, Charlotte.

Third District: Vaughn E. Bullard, Laurens, South Carolina; Louise B. Guy, Chapel Hill.

Fourth District: R. M. Blackman, Selma; Robert E. Brooks, Fayetteville.

Fifth District: Glenn E. Minah, Ann Arbor, Michigan.

**22-1973-H. Resolved**, that the House of Delegates endorse the efforts of NCD-PAC and encourage 100 percent participation by the North Carolina Dental Society membership.

#### TRIBUTE TO JAMES WYATT BAWDEN, D.D.S.

James Wyatt Bawden, D.D.S., Dean of the School of Dentistry, University of North Carolina, has endeared himself to the profession of dentistry in North Carolina, and the North Carolina Dental Society makes the following resolution a part of the proceedings of the 117th Annual Session and the House of Delegates, March 31, 1973.

Whereas, the North Carolina Dental Society and its membership have enjoyed a position of leadership in dental health care on the National level, and

Whereas, the University of North Carolina School of Dentistry is an internationally known institution of excellence in teaching, service and research with exceptional equal, and Whereas, this reputation is a reflection on the dedication of the membership of the oldest dental society in the nation as it works in concert with the chief administrator of the University of North Carolina School of Dentistry and his faculty, and

Whereas, the North Carolina Dental Society recognizes the efforts of Dean Bawden and his faculty to produce a superior dental health service to the people of North Carolina and this nation by vision and innovation, therefore be it

**23-1973-H. Resolved**, that the North Carolina Dental Society award a vote of confidence and appreciation to James Wyatt Bawden, D.D.S., Dean of the University of North Carolina School of Dentistry, a man of vision, integrity, dedication, wisdom and compassion, and be it further

**Resolved**, that copies of this resolution be transmitted to: The Honorable James E. Holshouser, Jr., Governor of North Carolina and Chairman, Board of Trustees of the University of North Carolina; William C. Friday, President, Consolidated University of North Carolina; N. Ferebee Taylor, Chancellor, University of North Carolina at Chapel Hill; Cecil G. Sheps, Vice Chancellor for Health Affairs, University of North Carolina; C. Gordon Watson, Executive Director, American Dental Association; and, James Wyatt Bawden, Dean, School of Dentistry, University of North Carolina.

#### REJECTED:

**24-1973-H. Resolved**, that the House of Delegates of the North Carolina Dental Society strongly urge the North Carolina State Board of Dental Examiners to eliminate or severely reduce the 3 year requirement for Provisional Licensure of Dental Hygienists.

#### ADOPTED:

**25-1973-H. Resolved**, that the Annual Session Committee be instructed to offer an invitation to the various schools that offer dental education programs to participate in our scientific sessions by means of whatever type exhibit they deem appropriate.

**26-1973-H. Resolved**, that the formation of the new Continuing Dental Education Committee of North Carolina represents a forward step in a coordinated approach in providing quality con-

tinuing dental education to dentists and their auxiliaries in North Carolina, and be it further

**Resolved**, that the North Carolina Dental Society pledges its support of this new committee.

**27-1973-H. Resolved**, that in the future, committees on dental hygienists be appointed on the state and district levels, composed of four members from the North Carolina Dental Society and four members from the North Carolina Dental Hygienists Association as follows: the president, president-elect, a member of the Executive Committee and one member-at-large, and be it further

**Resolved**, that member-at-large serve as chairman, and be it further

**Resolved**, that these committees meet at least once annually.

**28-1973-H. Resolved**, that the 1973-74 Committee on Hospital Dental Service be authorized and directed to conduct the survey among members of the North Carolina Dental Society.

**29-1973-H. Resolved**, that the House of Delegates authorize the expenditure of surplus funds in excess of the \$7,100 allocated in the budget for the fiscal year 1972-73, but not to exceed \$11,000 for the publication of the *North Carolina Dental Journal*.

**30-1973-H. Resolved**, that the House of Delegates suggest and recommend to the Editor of the *North Carolina Dental Journal* that future advertisements reflect more adequately the Society's concern for positive dental treatment as evidenced by increased advertisements for preventive dentistry drugs and devices and advertisements concerned with general nutrition and health.

#### ADOPTED AS AMENDED:

**31-1973-H. Resolved**, that the Dental Health Committee continue to investigate and evaluate dental care provided in state agencies until all state agencies have been evaluated, and be it further

**Resolved**, that the report submitted to the 1973 House of Delegates be incorporated in the report of the Committee to the 1974 House of Delegates.

#### ADOPTED:

**32-1973-H. Resolved**, that the House of Delegates direct the Dental Health Committee to give to the institutions studied reports of and recommendations concerning their dental programs and that the committee at its discretion, release to the news media information which they deem necessary to accomplish the desired results, and be it further

**Resolved**, that a subcommittee be established to arrive at minimal dental health standards for institutionalized people and that the committee also be instructed to arrive at ideal standards.

**33-1973-H. Resolved**, that the House of Delegates urges the State of North Carolina to rectify the inequities which have been demonstrated by salary increments for M.D.'s but which have not been made for dentists in similar pay levels.

#### REJECTED:

**34-1973-H. Resolved**, that the North Carolina Dental Society urge in the strongest manner possible that the State Board of Dental Examiners immediately seek ways under the present dental law to expedite the completion of the present expanded duty research program at the University of North Carolina Research Center, and be it further

**Resolved**, that if the Board will not, under the present law, approve the completion of this study, that the Dental Practice Act Committee be directed to immediately seek changes in the Dental Practice Act that would allow this program to be completed.

#### ADOPTED:

**35-1973-H. Resolved**, that the House of Delegates authorizes the Executive Committee to recommend to the membership that if positive results are not achieved in the School Health Program by the beginning of the next school year that dentists who participate in the program regretfully withdraw until definite indica-

tions of improvement can be established, and be it further

Resolved, that the administrator of the School Health Program be afforded a copy of this resolution.

#### REJECTED

**36-1973-H. Resolved**, that the salary arrangement for the Executive Secretary be determined at time of contract renewal in lieu of fixed salary increases, and be it further

Resolved, that the custom of travel and convention expense for wife of Executive Secretary be discontinued, and be it further

Resolved, that Central Office make available needed secretarial aid to state committees and constituent societies as requested by same. The secretary shall use mature judgment in determining necessity of need.

#### ADOPTED:

**37-1973-H. Resolved**, that the House of Delegates offers its unanimous support to the efforts of the Preventive Dentistry Program and that it offers its full endorsement of House Bill No. 884.

#### REJECTED:

**38-1973-H. Resolved**, that avenues, other than changes in the Dental Practice Act be explored to allow research, investigation and experimentation in the use of expanded duties auxiliaries, and be it further

Resolved, that the UNC School of Dentistry be encouraged to consider following the plans for the training of expanded duty auxiliaries currently existing in the State of Virginia.

**39-1973-H. Resolved**, that the House of Delegates approve in principle redistricting of the North Carolina Dental Society and requests Subcommittee on Redistricting and the Long Range Planning Committee to proceed with formalization of plans to effect the changes necessary, and be it further

Resolved, that when the plans are formalized they shall be submitted to the House of Delegates for final approval.

**40-1973-H. Resolved**, that nominations for members of the State Board of Dental Examiners be made at the second General Session during the Annual Meeting of the Society with the understanding that this would not preclude further nominations as provided under State Law.

**41-1973-H. Resolved**, that the Dental Laboratory Committee, in consultation with the North Carolina Dental Laboratory Association, develop a mechanism for the registration of dental laboratories in this State, and be it further

Resolved, that this mechanism be submitted to the House of Delegates for approval.

#### POSTPONED INDEFINITELY:

**42-1973-H. Resolved**, that the specialties that have organizations within our State be invited to send an official representative to this body with the privilege of the floor without a vote.

#### ADOPTED AS AMENDED:

**43-1973-H. Resolved**, that the North Carolina Dental Society urge in the strongest manner possible that all parties concerned, within ten days, initiate to seek ways under the present dental law to expedite the completion of the present expanded duty research program at the University of North Carolina Research Center, and be it further

Resolved, that the above include a joint meeting and consultation with the Attorney General by a joint committee made up of representatives from the North Carolina Dental Society, the North Carolina State Board of Dental Examiners, the University of North Carolina School of Dentistry and their legal representatives, if possible, and be it further

Resolved, that if the above does not result in a method of allowing the study to be completed that the Dental Practice Act Committee be directed to seek changes that would allow the program to be completed.

#### ADOPTED:

**44-1973-H. Resolved**, that the resolution concerning the salary arrangement of the Executive Secretary adopted by the 1966 House of Delegates (Trans. 1966:92) be rescinded, and be it further

Resolved, that the Executive Committee be empowered to negotiate with the Executive Secretary and his staff the intent of resolution 36.

**45-1973-H. Resolved**, that the House of Delegates re-affirm its confidence in Dr. James W. Bawden, Dean of the University of North Carolina School of Dentistry, as expressed in resolution 41, and be it further

Resolved, that Dean Bawden be urgently requested to reconsider submitting his resignation as Dean of the University of North Carolina School of Dentistry.

## General Sessions

SUNDAY, MAY 13, 1973

MONDAY, MAY 14, 1973

WEDNESDAY, MAY 16, 1973

#### FIRST GENERAL SESSION

Sunday, May 13, 1973

**Call to Order:** The first general session of the 117th Annual Session of the North Carolina Dental Society was called to order by President Joseph M. Johnson at 8:46 p.m., Sunday, May 13, 1973, in the Cardinal Ballroom of The Carolina, Pinehurst. Dr. Robert B. Litton gave the invocation.

**Introduction of Officers and Guests:** President Johnson introduced the Society officers and officers and representatives of allied organizations in attendance.

**Auxiliary Scrap Amalgam Drive:** Mrs. R. Willard Hinnant, chairman of the 1973 North Carolina Dental Auxiliary Scrap Amalgam Drive, presented a check for \$6,870.24 to Dr. Thomas G. Nisbet, president, Dental Foundation of North Carolina, Inc.

**President's Report:** President Johnson presented his report to the Society.

**Address by ADA Executive Director:** Dr. C. Gordon Watson of Chicago, Illinois, executive director, American Dental Association, addressed Society members and guests.

**Honorary Membership:** President Johnson presented a certificate of honorary membership in the Society to Dr. C. Gordon Watson, Chicago, Illinois.

**Report of Fifth District Trustee:** Dr. John M. Faust of Hattiesburg, Mississippi, Trustee, Fifth District, American Dental Association, presented his report to the Society.

**Tribute to Dr. Erbie M. Medlin:** Dr. Ralph D. Coffey paid tribute to Dr. Erbie M. Medlin of Aberdeen for his dedicated service to his profession, his state and his community and presented to him an engraved silver tray as an expression of the gratitude and appreciation of the North Carolina Dental Society delegates to the ADA of which Dr. Medlin had been a delegate for the past twelve years.

**Preventive Dentistry Plaque:** President Johnson accepted a plaque for the Society presented by the ADA as the first annual preventive dentistry award to the North Carolina Preventive Dentistry Committee.

**Nomination of Officers:** President Johnson called for nominations for Society officers for 1973-74.

Dr. Charles W. Horton of High Point was nominated for the office of president-elect by Dr. Claiborne W. Poindexter of Greensboro.

Dr. Gerald M. Cathey of Chapel Hill was nominated for the office of vice president by Dr. William L. Hand, Jr. of New Bern.

Dr. J. Harry Spillman was nominated for the office of secretary-treasurer by Dr. G. S. Abernethy of Hickory.

Dr. Robert H. Gainey of Fayetteville was nominated as a dele-

gate to the American Dental Association for a term of three years by Dr. Pearce Roberts, Jr. of Asheville.

Dr. Joseph M. Johnson of Laurinburg was nominated as a delegate to the American Dental Association for a term of three years by Dr. Frederick G. Hasty of Fayetteville.

President Johnson announced that further nominations would be accepted at the second general session, prior to election of officers.

**Announcements:** Dr. Donald D. Culp, chairman of the Program Committee, urged the members to attend the Scientific Sessions on Monday and Tuesday.

Mr. Andrew M. Cunningham read a telegram extending best wishes for a successful annual meeting from Dr. Louis A. Saporito, president, American Dental Association.

Mr. Cunningham announced that at 5:30 registration totaled 551, including 258 members.

**Adjournment:** The meeting was adjourned at 10:45 p.m.

## SECOND GENERAL SESSION

Monday, May 14, 1973

**Call to Order:** The second general session of the 117th Annual Session of the North Carolina Dental Society was called to order by President Joseph M. Johnson at 8:45 p.m., Monday, May 14, 1973, in the Cardinal Ballroom of The Carolina, Pinehurst. Dr. Benjamin R. Baker led in prayer.

**Dental Foundation Report:** Dr. Thomas G. Nisbet, president, Dental Foundation of N. C., reported on the Foundation's progress during the past year.

**Report of Board of Dental Examiners:** Dr. R. Hogan Gaskins, Jr. of Jacksonville, president, North Carolina State Board of Dental Examiners, reported on Board affairs during the past year.

**UNC School of Dentistry Report:** Dr. James W. Bawden, dean, University of North Carolina School of Dentistry, reviewed the activities now in progress at the school, including the new curriculum.

**North Carolina Dental Political Action Committee Report:** Dr. Harold E. Maxwell of Fayetteville, chairman, North Carolina Dental Political Action Committee, reported on the membership and functions of the N.C.D.P.A.C.

**Report of the North Carolina Dental Forum:** Dr. James A. Privette of Kinston, chairman, North Carolina Dental Forum, reviewed the conception and recommendations of the Dental Forum.

**Dental Health Committee Report:** Dr. Zeno L. Edwards, Jr. of Washington, chairman, Dental Health Committee, reported on the investigation by the committee into dental care provided by various state agencies.

**Dental Education Committee Report:** Dr. R. B. Barden of Wilmington, chairman, Dental Education Committee, reported on various dental education programs offered in the state and the new curriculum at the University of North Carolina School of Dentistry.

**Election of Officers:** Dr. Robert B. Litton announced the appointment of the following tellers: D. F. Hord, Walter S. Linville and William G. Ware.

Dr. Litton called for further nominations for the offices of president, president-elect, vice president, secretary-treasurer and delegates to the American Dental Association.

There being no further nominations, the following were declared elected by acclamation:

President-Elect—Charles W. Horton

Vice President—Gerald M. Cathey

Secretary-Treasurer—J. Harry Spillman

A secret ballot vote was held for the American Dental Association delegate position with the result:

ADA Delegate—Joseph M. Johnson

**1975 Annual Session:** Dr. Charles W. Horton moved that the Society hold its 1975 Annual Session in Pinehurst. Dr. Wade H. Breeland seconded the motion and it was carried.

**House of Delegates:** Dr. Claibourne W. Poindexter moved that the North Carolina Dental Society Annual Session request that the House of Delegates give consideration to a concurrent meeting of the Annual Session and the House of Delegates. The motion was seconded and it was carried.

**Registration:** The executive secretary announced that registration at 5:30 p.m. totaled 1,569, including 691 members.

**Adjournment:** The meeting was adjourned at 10:51 p.m.

## THIRD GENERAL SESSION

Wednesday, May 16, 1973

**Call to Order:** The third general session of the 117th Annual Session of the North Carolina Dental Society was called to order by President Joseph M. Johnson at 11:37 a.m., Wednesday, May 16, 1973, in the Cardinal Ballroom of The Carolina, Pinehurst. Dr. William A. Myatt led in prayer.

**Installation of Officers:** President Johnson installed Dr. James A. Harrell as president for 1973-74 and a delegate to the American Dental Association for a one-year term.

Dr. Harrell then installed the newly elected officers and ADA delegate as follows: Charles W. Horton, president-elect; Gerald M. Cathey, vice president; J. Harry Spillman, secretary-treasurer; Joseph M. Johnson, delegate to the American Dental Association for a three-year term.

**Presidential Appointments:** President Harrell announced the following appointments: William A. Current, chairman of the Executive Committee; R. B. Barden, member of the Executive Committee for a term of three years; Ralph D. Coffey, speaker of the House of Delegates; Darden J. Eure, Jr., general chairman, 1974 Annual Session.

**Registration:** The executive secretary announced that registration for the 117th Annual Session totaled 2,159 with the total attendance of the dental hygienists unreported.

### Members:

First District	76
Second District	204
Third District	216
Fourth District	159
Fifth District	132
Total Members	
Dental Auxiliary	384
Exhibitors	153
Dental Assistants	440
Dental Hygienists	21
Laboratory Technicians	65
Students	52
Guests	257
TOTAL	2,159

## STANDING COMMITTEES

**ANNUAL SESSION:** Darden J. Eure, Jr., chairman; Keith L. Bentley, Carle W. Mason, Jr., Baxter B. Sapp, Jr., Robert H. Gainey.

### Subcommittees

**Arrangements:** Keith L. Bentley, chairman; David H. Freshwater, T. C. Hesmer, Jr., Jon W. Couch.

**Projected Clinics:** Baxter B. Sapp, Jr., chairman; Pearce Roberts, Jr., Norman F. Ross, Galen W. Quinn, James A. Privette, Kenneth R. Diehl, Murry W. Holland, Eldon H. Parks, John B. Sowter, Edward F. Harris, Kenneth M. Ray, William L. Hand, Jr.

**Table Clinics:** Eldon H. Parks, chairman; James E. Elliott, Jr. (First District); Victor Andrews (Second District); Morris H. Griffin (Third District); Larry A. Williams (Fourth District); Augustine W. Tucker (Fifth District).

**Commercial Exhibits:** Charles M. Kistler, chairman; Larry A. Williams, Philip W. Thomas.

**Entertainment:** Robert H. Gainey (Entertainment and Dance); William L. Hand, Jr. (Banquet).

**Monitor:** Carle W. Mason, Jr., chairman; A. J. Bullard, Jr., Pascal S. Camak, John R. Dunn, James C. Eagle, Jr., Thomas J. Head, Jr., Samuel P. Jackson, John D. Kiser, Jr., Frederick B. Lopp, D. T. Marshburn, John A. Matkis, Walter S. Morris, Jr., H. W. Ridout, Lawrence D. Rivers, James B. Slack, Evangelo Vagianos, Raymond B. Warren, G. Curtis Wilson, Robert W. Wilson.

**Auxiliary:** Leonard R. Cashion.

**Program:** Baxter B. Sapp, Jr., chairman; Pearce Roberts, Jr., Norman F. Ross, Galen W. Quinn, James A. Privette, Kenneth R. Diehl, Murry W. Holland, Eldon H. Parks, John B. Sowter, Edward F. Harris, Kenneth M. Ray, William L. Hand, Jr. **Publicity:** L. P. Megginson, Jr., chairman; Carey T. Wells, Jr., John R. Dunn, John D. Hamrick, P. W. Jessup, R. Willard Hinnant.

**Scientific Exhibits:** Cecil R. Lupton, chairman; Edward V. Wilkins, Eugene F. Howden.

**Sports:** William R. Hartness, III, chairman; James E. Patti, Charles J. Harris, Bobby G. Wooten.

**CONSTITUTION AND BYLAWS:** William G. Schneider, chairman (77); C. P. Godwin (76); Thomas G. Nisbet (75); Charles A. Reap (74); Shuford Abernethy (78).

**DENTAL CARE PROGRAMS:** Walter S. Linville, Jr., chairman; James H. Lee, William E. Kidd, D. W. Seifert, Jr., William G. Ware, Jr., Joseph E. Campbell, George G. Dudney, Richard H. Graham, Charles W. Horton.

#### Subcommittees

**State Agencies:** William E. Kidd, chairman; James L. Cox, James A. Privette, Harry F. Cofield, Samuel N. Trueblood.

**State Peer Review:** James H. Lee, chairman; C. D. Kistler, Lewis W. Lee, William H. Price, Kenneth M. Ray, Maurice B. Richardson.

**Industrial Commission:** D. W. Seifert, chairman; John F. Povich, III, Clarence L. Shoffner, Cleveland W. Floyd, Frank H. Walker, Robert W. Sugg.

**DENTAL EDUCATION:** R. B. Barden, chairman; Riley E. Spoon, Jr., C. Dean Couch, Jr., Kenneth M. Ray, R. A. Carnavale, Shuford Abernethy, Guy R. Willis, Thomas G. Collins, J. Harry Spillman, William H. Oliver, James M. Zealy.

#### Subcommittees

**Continuing Education:** J. Harry Spillman, chairman; Cecil A. Pless, Jr., Roy L. Lindahl, consultant; J. Fred Sproul, William C. Keith, William H. Price, Jon W. Couch, Judy Milspaugh, President, N. C. Dental Hygienists Association; Lunde Amos, Secretary, N. C. Dental Hygienists Association; Linda Heffinger, President, N. C. Dental Assistants Association; Lurlene Medford, Secretary, N. C. Dental Assistants Association.

**Dental Assistants:** William H. Oliver, Advisor and Chairman; Charles E. Jones, Roy L. Earp, Roger E. Barton, T. S. Fleming, Robert M. Wilkinson, Linda Heffinger, President, N. C. Dental Assistants Association.

**Dental Hygienists:** James M. Zealy, chairman; Norman B. Grantham, Joseph R. Suggs, Keith L. Bentley, Carey T. Wells, Jr., C. R. VanderVoort, Judy Milspaugh, President, N. C. Dental Hygienists Association.

**DENTAL HEALTH:** Zeno L. Edwards, Jr., chairman; Robert B. Taylor, E. A. Pearson, Jr., Jack A. Menius, Alton L. Smith, Ralph A. Young, Franklin E. Martin, A. Breece Breland.

#### Subcommittees

**Minimal Dental Health Standards for State Institutions:** Franklin E. Martin, chairman; Ralph A. Young, Freeman C. Slaughter, John W. Mainwaring, Jr., J. H. Dearman, Claude W. Drake. **Cancer:** Jeremiah N. Partrick, chairman; E. Jefferson Burkes, Robert W. Holmes, Lloyd B. Stanley, Walter H. Finch, Jr., Irvin A. Roseman, Wayne Anderson, Claude J. Hearn, John D. Ward, Charlotte W. Sutton, R.D.H., Elizabeth Wadsworth, D.A., John W. Barts, Jr., William G. Quarles.

**DENTAL LABORATORY RELATIONS:** Robert B. Litton (78) chairman; Victor L. Andrews, Jr., (75); M. W. Carpenter (74); James L. Cox (76); Robert A. George (77).

**ETHICS:** Robert H. Gainey, chairman (77); John A. S. Reynolds (76); James A. Privette (75); S. H. Isenhower (74); Baxter B. Sapp, Jr. (78).

**FEDERAL DENTAL SERVICES:** R. A. Carnevale, chairman; James H. Lee, Frederick G. Hasty, W. Alex Willis, J. Harry Spillman.

**HOSPITAL DENTAL SERVICE:** R. Donald Coffey, chairman; Ernest W. Small, Jack A. Menius, William J. Porter, W. Robert Caviness, Theodore R. Oldenburg, W. R. Secosky.

**INSURANCE:** J. S. D. Nelson, chairman (78); Derwood L. Ashworth (74); Thomas L. Blair (75); John S. Dilday (76); Donald E. Bland (77).

**LEGISLATIVE:** Richard H. Graham, chairman; Mott P. Blair, Charles T. Barker, Harold E. Maxwell, Francis A. Buchanan, Jon W. Couch, J. B. Freedland, Robert H. Watson.

**LONG RANGE PLANNING:** J. B. Freedland, chairman (76); Darden J. Eure, Jr. (78); James A. Harrell (74); A. C. Current, Jr. (75); J. Harry Spillman (77); Gerald M. Cathey, consultant.

**MEMBERSHIP:** Gerald M. Cathey; (5 District Vice Presidents).

**PREVENTIVE DENTISTRY:** Ralph Young, chairman; Claude Drake, J. Fred Sproul, M. W. Aldridge, Fred H. Miller, Carle Mason, Jr.

**PROFESSIONAL RELATIONS:** Samuel H. Isenhower, chairman; Charles P. Godwin, Herbert W. Gooding, James H. Edwards, F. A. Buchanan, Mitchell W. Wallace, D. F. Hord, L. Doyle Pruitt, Kenneth D. Owen, R. Bruce Warlick, R. Hogan Gaskins, Jr., Joe B. Roberson, William G. Davis.

**PUBLIC RELATIONS:** M. Lynwood Cherry, chairman; Harry N. Baldwin, Colin P. Osborne, Jr., William A. Mynatt, Wayne Anderson.

**RELIEF:** William L. Hand, Jr., chairman (77); S. E. Moser (76); S. L. Bobbitt (75); J. William Heinz (78); Guy R. Willis (74).

#### SPECIAL COMMITTEES

**CENTRAL OFFICE AND FINANCE COMMITTEE:** J. Harry Spillman, chairman; William A. Current, Joseph M. Johnson.

**ADPAC:** Harold E. Maxwell, chairman; F. A. Buchanan, William G. Quarles, L. C. Holshouser, Julius R. Cooley, Mott P. Blair, B. W. Williamson, Jr., Jerry F. Wood, Hal P. Cockerham, W. H. Gray, Jr., Thomas B. Reid, Jr., Richard H. Graham.

**CHILDREN'S DENTAL HEALTH WEEK:** President-Elect, N. C. Society of Dentistry for Children, D. Robert Williams.

**DENTAL PRACTICE ACT:** Fred H. Miller, chairman; Walter S. Linville, James A. Privette.

## Officers 1973-74 Allied Organizations

### NORTH CAROLINA DENTAL ASSISTANTS ASSOCIATION

**President:** Linda Heffinger,  
1104 Trogdon Drive.....Eden 27288  
**President-Elect:** Betty Scott,  
1207 K. Green Oak Lane.....Charlotte 28206

**Vice President:** Barbara Talbert,  
Route 1, Box 230B.....Chapel Hill 27514

**Secretary:** Lurlene Medford, 864 Haywood Rd., Asheville 28806

**Asst. Secretary:** Naomi Lutz, Rt. 2, Box 158-A, Newton 28658

**Treasurer:** Barbara Hester,  
2 Greenwood Apartments.....Rocky Mount 27801  
**Past President:** Wilma Wilson,  
300 Mt. View Court.....Lexington 27292

#### NORTH CAROLINA DENTAL AUXILIARY

**President:** Mrs. Leonard Cashion,  
1309 Westminster Drive.....High Point 27260  
**President-Elect:** Mrs. Richard M. Fields,  
Box 277, Neely Rd.....Pleasant Garden 27313  
**Vice President:** Mrs. Franklin D. Pattishall,  
6008 Bismark Place.....Charlotte 28211  
**Corresponding Secretary:** Mrs. N. C. Johnson, Jr.,  
1505 Country Club Drive.....High Point 27262  
**Recording Secretary:** Mrs. Charles W. Horton,  
Route 11, Box 385.....Greensboro 27410  
**Treasurer:** Mrs. John F. Povlich, III,  
206 Crestview Road.....Raleigh 27609  
**Historian:** Mrs. G. Curtis Wilson,  
1109 Salem Street.....Wilson 27893

**Parliamentarian:** Mrs. M. G. Delbridge,  
Best Road, Route 4.....Goldsboro 27530

#### NORTH CAROLINA DENTAL HYGIENISTS ASSOCIATION

**President:** Judy Millspaugh, 5409 Portree Place..Raleigh 27606  
**President-Elect:** Gene Rauch, Box 147.....Mocksville 27028  
**Vice President:** Chris Lusk, 6320 St. John Lane..Charlotte 28210  
**Corresponding Secretary:** Chris Shields,  
Apt. J-4, Manorcrest Court.....Raleigh 27609  
**Recording Secretary:** Lunde Amos,  
1709 Noble Place.....Greensboro 27408  
**Treasurer:** Susan White, 12-A Stratford Hills..Chapel Hill 27514

#### NORTH CAROLINA DENTAL LABORATORY ASSOCIATION

**President:** Willard Perry, Box 86.....Graham 27253  
**Vice President:** Robert Lanier,  
2300 Wayne Memorial Drive.....Goldsboro 27530  
**Secretary-Treasurer:** Charles T. Wainscott, Jr.,  
1700 Abbey Place.....Charlotte 28209

# Presidents of the North Carolina Dental Society Since Its Organization

1856.....	*W. F. Bason	1905-06.....	*J. S. Betts	1939-40.....	F. O. Alford
1857.....	*E. H. Andrews	1906-07.....	*J. R. Osborne	1940-41.....	*C. M. Parks
1858.....	*B. F. Arrington	1907-08.....	*D. L. James	1941-42.....	C. C. Poindexter
1866.....	*B. F. Arrington	1908-09.....	*F. L. Hunt	1942-43.....	*Paul Fitzgerald
1875-76.....	*B. F. Arrington	1909-10.....	*J. C. Watkins	1943-44.....	*Clyde E. Minges
1876-77.....	*V. E. Turner	1910-11.....	*A. H. Fleming	1944-45.....	O. C. Barker
1877-78.....	*J. W. Hunter	1911-12.....	*P. E. Horton	1946-47.....	E. M. Medlin
1878-79.....	*E. L. Hunter	1912-13.....	*R. G. Sherrill	1947-48.....	*R. M. Olive
1879-80.....	*D. E. Everett	1913-14.....	*C. F. Smithson	1948-49.....	C. W. Sanders
1880-81.....	*Isaiah Simpson	1914-15.....	*J. A. Sinclair	1949-50.....	Walter T. McFall
1881-82.....	*M. A. Bland	1915-16.....	*I. H. Davis	1950-51.....	A. S. Bumgardner
1882-83.....	*J. R. Griffith	1916-17.....	*R. O. Apple	1951-52.....	*R. Fred Hunt
1883-84.....	*W. H. Hoffman	1917-18.....	*R. M. Squires	1952-53.....	*A. C. Current
1884-85.....	*J. H. Durham	1918-19.....	*J. N. Johnson	1953-54.....	Neal Sheffield
1885-86.....	*J. E. Matthews	1919-20.....	W. T. Martin	1954-55.....	*B. N. Walker
1886-87.....	*B. H. Douglas	1920-21.....	*J. H. Judd	1955-56.....	*J. W. Branham
1887-88.....	*T. M. Hunter	1921-22.....	*W. M. Robey	1956-57.....	H. K. Thompson
1888-89.....	*V. E. Turner	1922-23.....	*S. R. Horton	1957-58.....	R. D. Coffey
1889-90.....	*S. P. Hilliard	1923-24.....	*R. M. Morrow	1958-59.....	S. E. Moser
1890-91.....	*H. C. Herring	1924-25.....	*J. A. McClung	1959-60.....	*W. B. Sherrod
1891-92.....	*C. L. Alexander	1925-26.....	*H. O. Lineberger	1960-61.....	L. H. Butler
1892-93.....	*F. S. Harris	1926-27.....	B. F. Hall	1961-62.....	N. F. Ross
1893-94.....	*C. A. Rominger	1927-28.....	*E. B. Howle	1962-63.....	E. D. Baker
1894-95.....	*H. D. Harper	1928-29.....	*I. R. Self	1963-64.....	S. Byron Towler
1895-96.....	*R. H. Jones	1929-30.....	*J. H. Wheeler	1964-65.....	Darden J. Eure
1896-97.....	*J. E. Wyche	1930-31.....	Paul E. Jones	1965-66.....	Pearce Roberts, Jr.
1897-98.....	*H. V. Horton	1931-32.....	*Dennis Keel	1966-67.....	J. H. Guion
1898-99.....	*C. W. Banner	1932-33.....	*Wilbert Jackson	1967-68.....	George F. Kirkland, Jr.
1899-1900.....	*A. C. Liverman	1933-34.....	*Ernest A. Branch	1968-69.....	Colin P. Osborne, Jr.
1900-01.....	*E. J. Tucker	1934-35.....	*L. M. Edwards	1969-70.....	C. W. Poindexter
1901-02.....	*J. S. Spurgeon	1935-36.....	*Z. L. Edwards	1970-71.....	W. L. Hand, Jr.
1902-03.....	*J. H. Benton	1936-37.....	*D. L. Pridgen	1971-72.....	Wade H. Breeland
1903-04.....	*J. M. Fleming	1937-38.....	*J. F. Reece	1972-73.....	Joseph M. Johnson
1904-05.....	*W. B. Ramsey	1938-39.....	G. Fred Hale	1973-74.....	James A. Harrell

\*Deceased.

## NINETEENTH ANNUAL DENTAL SEMINAR DAY

Dental Seminar Speaker: Dr. Loran P. Pilling  
Minneapolis Clinic of Psychiatry and Neurology  
Date: December 7, 1973 (Friday)  
Place: Memorial Hall, UNC Campus, Chapel Hill, N. C.  
Subject: The Emotional Aspects of the Dental Patient

To provide his patients with optimal care, the dentist needs to have an understanding of the total person. His approach to the patient or the procedure under consideration may be altered depending upon the patient's emotional state. Emotional conflicts often influence the patient's symptoms and affect his response to dental care.

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An understanding of psychiatric syndromes will help the dentist with the differential diagnosis and treatment of these patients.

Morning session: 8:30 a.m.-12:00 noon  
Afternoon session: 2:00 p.m.- 4:00 p.m.

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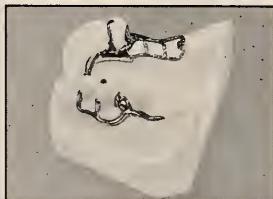
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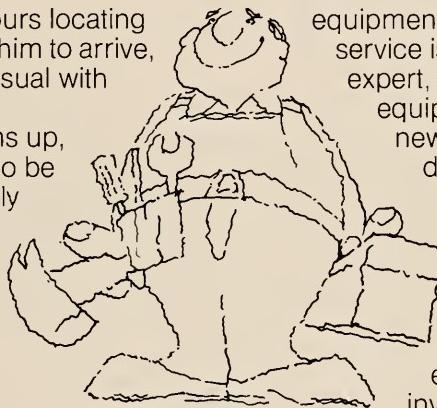
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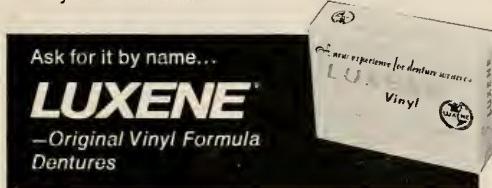
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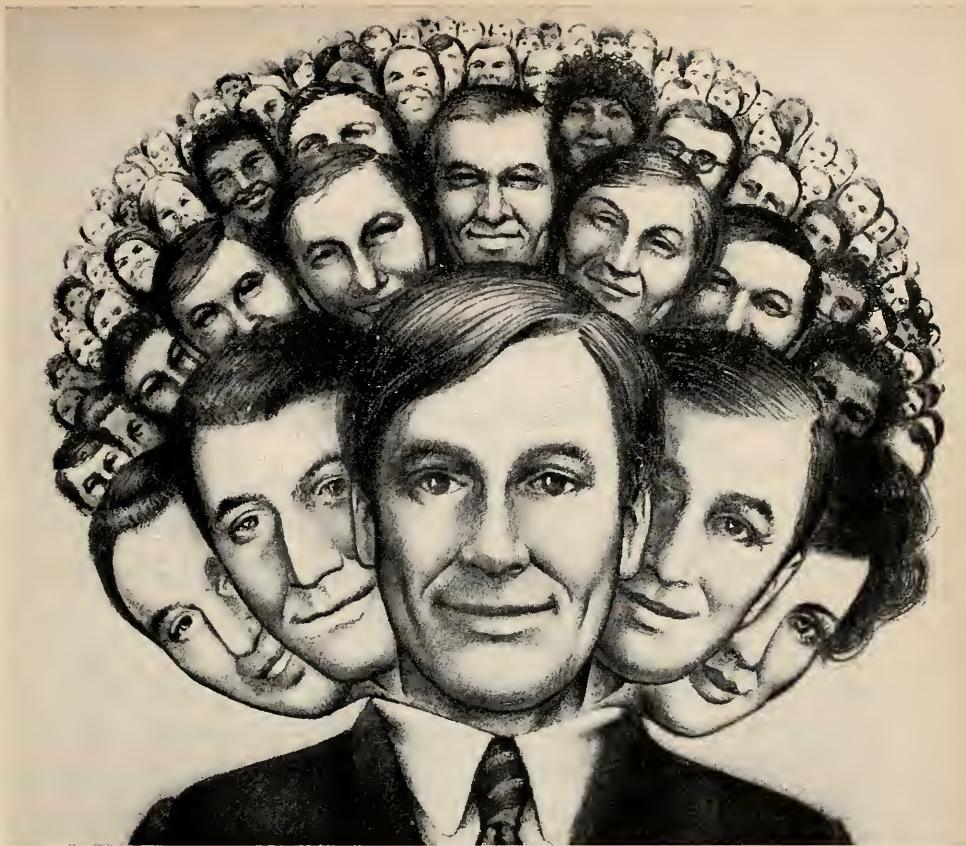
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